

THE EFFECT OF PEER RESPONSE GROUPS ON WRITING APPREHENSION,
WRITING ACHIEVEMENT, AND REVISION DECISIONS
OF ADULT COMMUNITY COLLEGE COMPOSITION STUDENTS

By

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Abstract of Dissertation Presented to the Graduate School
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OF ADULT COMMUNITY COLLEGE COMPOSITION STUDENTS

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The purpose of this research was to investigate the effect of peer response groups on students' writing apprehension, writing achievement, and revision decisions. A special emphasis was placed on students over the age of 25. Writing apprehension levels were measured by the Daly-Miller Writing Apprehension Measure. Writing achievement was measured by the holistic evaluation of compositions using the Diederich Essay Rating Scale. Revision decisions were evaluated by Faigley and Witte's Taxonomy of Revision Changes. The three measures were completed by 110 community college students in freshman level composition courses at the beginning and ending of a sixteen-week period. The treatment

groups participated in peer response groups for 30 minutes per week during the same time period.

After adjusting for pretest differences, three hypotheses were tested ($p < .05$) separately for ENC 1101 and ENC 1102 classes: There will be no significant differences among the posttest writing apprehension scores, posttest writing achievement scores, and posttest revision decision scores of the nontreatment and treatment groups; there will be no significant effect of age on the adjusted posttest scores for the three measures of nontreatment and treatment groups; and there will be no significant interaction effect of age and treatment on the adjusted posttest scores of the three measures in the nontreatment and treatment groups.

The null hypotheses were rejected for writing apprehension and writing achievement. They were retained for revision decisions of both ENC 1101 and ENC 1102 students. ENC 1101 students demonstrated a higher degree of writing apprehension and writing achievement than students in ENC 1102. Age showed a direct positive correlation with both apprehension and achievement.

More research should be conducted concerning the reduction of writing apprehension while increasing writing achievement. Findings at the community college were consistent with prior research at the college level which suggests that apprehension is associated with writing achievement, and that freshmen students revise mainly at the surface level.

CHAPTER I INTRODUCTION

In another decade, it is estimated, the typical community college student will be over the age of twenty-five. Adult learners, defined here as students age 25 and older, are fast becoming a large segment of the community college student population. With some reports estimating these students comprising as much as 50 percent of the school population, instructors should reevaluate their teaching strategies in terms of reaching a diverse group of students, many of whom will not fit the mold of the traditional 18-year-old enrollee. Even the term formerly associated with adult learners, nontraditional students, is becoming archaic as older students enter with increasing frequency through the open door.

Unfortunately, we don't know much about which instructional techniques work best with the adult learner, and much of what we do know is extrapolated from research conducted on children and adolescents. Many studies have sought to answer questions about why adults return to school, with the consensus being that to acquire or keep a job new knowledge is required, or that a major life event such as divorce, children leaving home, or the death of a spouse precipitates the drive to learn. Some studies report the characteristics of adult learners by income level and amount

of previous education. But few studies have examined actual teaching strategies and their effect on the academic achievement and/or social adjustment of adult college students. Even fewer studies have investigated whether gender plays a role in effective teaching strategies for adult learners.

Robert Brooke (1991) presents a theory of identity negotiations occurring in the college writing classroom. Brooke's theory provides an appropriate lens through which to view writing instruction for adult learners. The theory shifts the student's role as writer from regurgitator to reflective thinker. This shift proves useful for students beyond the writing classroom. As students negotiate and embrace the roles a writing situation offers and make them part of their ongoing behavior, they are learning.

The identity negotiation theory sees learning as influenced more by the roles offered to students in school than by any particular content or material being taught. It is in negotiating a response to these roles that individuals work out their future stances toward knowledge, toward authority, and toward academic learning, stances which could spell success or failure for the adult learner (Brooke, 1991, p.11).

Identity negotiation highlights the development of the self within a complex arena of competing social forces. Two assumptions guide Brooke's theory: first, that social interaction and role expectations affect a student's choices

in negotiating his or her identity in the writing classroom, and second, that the ever-present classroom forces of compliance and resistance can be mediated through the use of writing workshop format. In the first assumption, identity negotiation focuses on what the writing class establishes as the writer's role and what versions of these roles participants develop as class progresses. For example, a typical community college student may hold many different and conflicting social roles: mother, wife, employee, and student. In the writing classroom, participants must negotiate a stance toward the activity of writing and what it means in the social contexts around them. In a freshman composition class, they are also simultaneously negotiating their stance toward the school setting itself at the same time. Identity negotiation theory can provide a portrait of the important social context the individual experiences within the writing classroom.

The second assumption begins with the notion that college writing classes provide some inescapable roles. These classes are required for graduation, so all sorts of experiences and feelings about writing are represented within the participants. Rose (1988) points out that college writing classes act as a kind of initiation or testing ground, an environment which all must endure to achieve the role of college graduate. In this setting, individuals find it hard to escape the role of a student dependent upon the teacher for the "right" academic knowledge and must generally comply

with this role if they are to remain in school. In contrast, Brooke argues that writer's roles are not as inescapable. Writers are free to embrace, comply with, or reject their words as they wish.

In many college writing classrooms the roles for students and writers are opposed to each other. In contrast to the passive student role, the writing classroom can present writer's roles which value active and personal engagement in learning, and can facilitate that negotiation through the use of collaborative activities. Learning to write becomes more important when it stems from writers' roles which enhance an individual's sense of social self (Cooper 1989). Students' ability to write, motivation to write, and their effectiveness when writing in contexts beyond the classroom depend upon the development of such writer's roles.

Brooke focuses his discussion of identity negotiation on the writing workshop, a format which allows a student free choice of topic, ample time for drafting and revision, small peer group critiques and teacher conferences. Writing workshops allow students to focus energy directly on writer's roles as opposed to traditional student roles, and help them in identifying and exploring writing opportunities in their lives beyond the classroom. Similarly, peer response groups shift the learner's role from passive to active, and the immediate verbal interaction of writer and readers helps to solidify the newly negotiated writer's role. Writers in peer

response groups may see that they can use writing as a means of addressing other roles they face: professional, personal, gender, ethnic. Confident learners and writers are ready to identify and explore various aspects of their social cultures, a real benefit if college writing instruction is to prepare students for thoughtful participation in their own cultures.

The community college freshman composition instructor encounters many adult learners who bring with them a fear of writing which can inhibit or color their identity negotiations of the writer's role. Writing apprehension is defined as the general anxiety that individuals might experience about writing as determined by the Daly-Miller Writing Apprehension Measure. Although most of us have experienced some degree of writing apprehension toward a composition task, adult learners are anxious for a variety of reasons: they haven't written an essay in 20 years, they didn't experience success with writing in their high school curriculum, or they fear that they are not as smart as younger students. Real or imagined, these fears interfere with the development of writing skills, the attainment of the writer's role, and exhibit themselves in these students' negative attitudes toward writing. Fear may keep some students from ever achieving the active engagement Brooke purports is necessary to assume the role of competent writer and thus increase a sense of social self-worth.

The use of peer response groups, a popular collaborative strategy in the teaching of composition, may help to reduce adult learners' writing apprehension. A peer response group is a small group of three to five members that meets to fulfill three goals: improving student texts, helping the writer to develop more strategies for writing and a better sense of how readers respond to the text, and helping writers see the social value in the kinds of writing they are doing (Brooke, 1994). The groups allow students to share their writing strengths and weaknesses as they respond to the papers of other group members in constructive and meaningful ways through the use of teacher-provided guiding questions.

Peer response groups may also serve to increase students' writing achievement, defined here as a student's competence in writing as measured by the holistic scoring of compositions, and levels of revision, which refers to a student's decision to change an aspect of his/her paper. Revision can occur on seven different levels: surface, or spelling and capitalization changes; lexical, phrase, clause, sentence, or multi-sentence levels, which cover addition, deletion, or substitution of words, phrases, clauses, and sentences; and text level, which is a change in audience, function, overall content, or total re-write of the essay (Bridwell, 1980). Revision choices demonstrate the extent to which the student has adopted the writer's role and dropped the traditional student model.

Statement of the Problem

Many adult learners come to college with a high degree of writing apprehension that interferes with their ability to succeed in composition classes. Their lack of confidence and low achievement in writing coupled with the fact that they have few academic and social support networks in place on campus sometimes prevents them from fully accepting the invitation to academic discourse and the writer's role offered by the composition class.

Daly, a major investigator of writing apprehension, found that the construct inhibited students in several ways. Apprehensive writers avoid writing tasks and instruction and as a result do not get sufficient practice to develop as competent writers. Highly apprehensive writers use significantly less intense language, and use fewer words and make fewer statements than low apprehensives. High apprehensives reported less writing success in the past and expected less in the future, a self-fulfilling prophecy in many instances (Daly, 1977, 1978; Daly & Miller, 1975; Faigley, Daly & Witte, 1981).

Writing apprehension prevents adult learners from achieving the new identity of competent writer necessary to successfully complete college composition classes. It also limits their participation in writing opportunities outside of class which may enrich their other social roles.

Need for the Study

When an educational institution's clientele changes dramatically, it has a responsibility to adapt to meet the needs of its new members. According to the Almanac of Higher Education (1991) students over the age of 25 now make up 63.6 percent of the community college student population. In Florida, the percentage is even higher--67.9 percent. From 1970 to 1985 the community college enrollment of adult learners increased by 114 percent nationally, while students under the age of 25 grew by only 15 percent (Watkins, 1990). The most recent projections by the U.S. Department of Education indicate that two-year colleges will grow by another one million students in the upcoming decade, suggesting that these institutions will play a major role in higher education well into the twenty-first century (Reynolds, 1994).

Although a 1989 Almanac of Higher Education survey of 9,996 two-year college faculty states that 85 percent of the respondents say their students are seriously underprepared in basic skills such as those required for written and oral communication, the Carnegie Commission estimates that only 10 percent of colleges nationally have taken steps to assist the adult learner in any concrete way (Clark, 1989).

Much of what we know about adult learners comes from three relatively limited areas: (1) "my life and times in

teaching" articles, (2) "why adults decide to study" research, and (3) extrapolation from theory derived from work with children and/or adolescents (Zemke & Zemke, 1981). Other research on adult learners concentrates on adult basic literacy skills such as reading or balancing a checkbook (Imel, 1991; 1992). How can the community college instructor meet the mission of designing strategies for adult learners when what we know about their preferences is sketchy at best?

Morrison (1994) notes that adult learners often bring a set of fears and anxieties with them to the classroom, the most common being lack of basic knowledge or skills, the fear of making mistakes, taking tests, or writing "good" papers, the fear of being slower than younger students, the fear of juggling a job, family and school, and a general fear of failure. They experience discord between the self-image of competence outside the classroom and the student image of incompetence and inferiority (Evans, 1989). Adults tend to take errors personally and are more likely to let them affect their self-esteem than younger students. Adults cite increasing or maintaining a sense of self-esteem and pleasure as strong secondary motivators for engaging in learning experiences. They have something real to lose in the classroom--self-esteem and ego are on the line (Zemke & Zemke, 1981).

Muench (1987) recognizes that adult students need help in building their self-confidence as students, in acquiring or refreshing study skills, and in managing their time and

other resources while in school. They also benefit from opportunities to interact with their peers and need to be actively involved in the educational process through sharing their relevant work and life experiences.

Students with a high degree of writing apprehension generally lack self-confidence and avoid writing situations whenever possible (Donlan, 1986). When they do write, highly apprehensive students are not likely to be receptive to instruction (Smith, 1984).

Several researchers have suggested that prior negative experience with writing is generally the source of the development of negative attitude toward writing (Daly, 1979; Harris, 1978; Rose, 1980). Smilkstein (1990) proposes that learning is a physical activity. Doing, trying, making and correcting mistakes is a vital part of the activity of learning. When negative emotions are present, they physically inhibit the learning process. Seiler, Garrison, and Bookar (1978) support this idea, noting that there is a significant correlation between writing apprehension and course grades.

Students who have never experienced success with writing are often discouraged by initial frustrations and discomforts felt at the beginning of a writing assignment and allow these attitudes to interfere with their writing. They miss the opportunity to become better writers through practice and they do not see the act of writing as rewarding. Students with a low degree of writing apprehension are able to put initial negative feelings into perspective because they are

self-confident and exhibit positive attitudes toward the act of writing. However, the best approach to take to reduce writing apprehension has not been clearly established by research (Hillocks, 1986).

Although the need for collaboration and participation is emphasized in adult education literature, there is little empirical support for collaborative learning as the best way to educate adults; there is also little discussion of collaborative learning itself, that is, what it is, how it is implemented, and its strengths and weaknesses. Research at the primary and secondary levels suggests that students learn better through noncompetitive, collaborative group work than in classrooms that are highly competitive and individualized. Whether or not that is true with adults is still largely untested (Bruffee, 1987, Imel, 1992). Benshoff (1991) reports that adults generally prefer more active approaches to learning and value opportunities to integrate academic learning with their life and work experiences, opportunities which can be provided by collaboration in the classroom, which also aid in the negotiations of new roles for adult learners.

Several research studies dealing with peer groups and the evaluation of writing indicate that improvement in theme-writing ability and grammar usage, when small groups of students engage in peer evaluation may equal or exceed the improvement that occurs under evaluation procedures carried out by the teacher alone (Ford, 1973; Lagana, 1972; Maize,

1952; Pierson, 1967; Sager, 1973; Sutton & Allen, 1964). Additional research by O'Donnell (1985) and Hillocks (1986) suggests that peer response or evaluation significantly improves writing ability. However, a landmark study by Fox (1980) showed no significant difference in college writing classrooms using the peer response group technique versus those using teacher-only feedback.

Exactly how response groups work to increase writing achievement is not known. Also uncertain are which facets of the composition process they improve. If the popular process approach to writing is accurate, steps from prewriting to drafting to revision to publication could be affected by the technique.

The area of revision warrants a closer look. Sommers (1980) indicates that many students resist changing anything except mechanics once they have a draft of a paper. Part of that resistance stems from the tediousness of rewriting but another part results from students' inability to resee their papers, to develop a reader's perspective, to assume the role of a writer. Peer response groups offer an excellent opportunity for students to practice the difficult role reversal Fleckenstein (1992) describes: "Writers need to perceive the desires or expectations their texts arouse in their projected readers and then check to see if those desires are satisfied" (p. 82). Again, empirical evidence on peer response groups and their effect on the composition process is limited.

Research Design and Methodology

In order to fulfill the purposes of the study--to investigate the effects of peer response groups on students' levels of writing apprehension, writing achievement, and level of revision--eight freshman composition instructors participated from Central Florida, St. Johns River, and Santa Fe Community Colleges, and from North Florida Junior College. Four instructors led nontreatment groups, conducting their classes as similar lecture, reading, assignment courses where drafting and revision was done outside of class, without peer interaction, in response to teacher comment only.

Nontreatment group refers to those students who were asked to write an expository composition and to complete the Daly-Miller Writing Apprehension Measure at the beginning and the ending of a sixteen-week period.

Four other instructors led treatment groups, which used peer response groups for a sixteen-week semester in their classrooms following a prescribed protocol. The treatment group completed the same tasks as the nontreatment groups, except that these students participated in a peer response group which met weekly for 30 minutes to share and critique their writing assignment rough drafts.

These community colleges, with the exception of Santa Fe, had a similar type of student population--mostly rural/suburban, with similar percentages of male/female and traditional/adult learners. Santa Fe serves a younger student

body, with many students transferring to the University of Florida after completing their associate's degrees. The college was included in the study because of its well-developed program to help displaced homemakers gain a college education. These colleges also approximated the gender/age distribution of other community colleges in the Florida community college system. Teachers included in the study were matched as closely as possible by teaching evaluations or teacher profiles supplied by the academic dean or department head.

A nonequivalent control-group pretest-posttest design was employed (Mason & Bramble, 1989). Although random assignment of individual students to treatment and nontreatment groups was not possible, intact classes were randomly assigned as treatment or nontreatment.

The Daly-Miller Writing Apprehension Measure was administered as a pretest to every student during the first week of the study and as a posttest during week 16. In addition, each student was given two hours during week one and week 16 to write an expository essay which incorporated narration in response to one of two equally difficult writing prompts. These essays were holistically scored by four professional raters. Holistic scoring is a guided procedure for rating written pieces. The scoring occurs quickly, impressionistically, by trained raters. A scoring guide which describes desirable characteristics of writing and identifies high, middle, and low quality levels for each feature is

usually used. In this study, a slightly modified version of the Paul Diederich Essay Rating Scale was used as the scoring guide. It is divided into two areas: (a) general merit, which includes ideas, organization, wording, and flavor; and (b) mechanics, which includes usage, sentence structure, punctuation, capitalization, abbreviations, numbers, spelling, handwriting, and neatness. The handwriting and neatness components were removed to modify the scale for this study. The raters had experience scoring the College Level Test of Academic Skills for the State of Florida Department of Education. They predictably had a high interrater reliability. Finally, first draft and final copies of two randomly selected essays per student were compared and analyzed for revision types and frequencies using the Taxonomy of Revision Changes devised by Faigley and Witte (1981).

An analysis of covariance was performed for each of the dependent variables (Kennedy & Bush, 1985; Mason & Bramble, 1989). A simple bivariate correlation was also performed to identify strengths of relationships between variables.

Statement of Hypotheses

The following research hypotheses were tested:

- H₁: There will be no significant differences ($p < .05$) in mean adjusted posttest scores of nontreatment and treatment groups on writing apprehension, writing achievement, and revision measures.

H₂: There will be no significant effect ($p < .05$) of age on the adjusted posttest scores of nontreatment and treatment groups on writing apprehension, writing achievement, and revision measures.

H₃: There will be no significant interaction effect ($p < .05$) of age and treatment on the adjusted posttest scores of nontreatment and treatment groups on writing apprehension, writing achievement, and revision measures.

Delimitations

Random sampling is the preferred method of doing experimental research; however, a quasi-experimental design, the non-equivalent control-group pretest-posttest design, was selected for this study due to the necessity of using intact college classes.

Eight instructors from area community colleges participated in the study. These teachers taught at least two sections of freshman composition. Four teachers led nontreatment groups and four led treatment groups. Treatments were randomly assigned to four of the groups. Pretest and posttest data on writing apprehension, writing achievement level, and level of revision changes were collected by the principal investigator using specific data collection procedures. The same procedures were followed by each teacher, thus teacher differences were controlled.

The subject population represented a balanced sample of community college students today. It is safe to conclude that the findings in this study could be generalized to the same types of populations and courses described herein.

The sixteen-week duration of the study was not a limitation. In Hillocks' (1986) metanalysis of 60 composition research studies, virtually no difference in effect size was found in studies under or over 17 weeks, thus disallowing the reporting of the link between duration and increased effect size with any confidence.

Differences in holistic scorers or raters was minimized through the careful selection of writing prompts which elicited expository papers incorporating narration. Hake (1986) found that in first-term college entry and exit essay exams, pure narrations were more likely to be misgraded than expositions that employed narration as a developmental strategy. She suggests specific prompts which have been used at Chicago State University and California State University at Los Angeles which were found to produce a very slight degree of grader variance. These prompts were used in this study. Scorers were unaware whether the essays were entry or exit, as Hake also found exit essays to be rated lower than entry essays when the categories were known by raters.

Scorers were four teachers trained in holistic scoring employed by the State of Florida Department of Education in scoring the College Level Academic Skills Test (CLAST). These scorers received extensive training and scoring opportunities through their association with the CLAST, so interscorer reliability was high.

Limitations

Five limiting factors were identified in this study. Limiting factors were history, maturation, teacher differences, mortality, and pretest effects.

This study was limited to students in preestablished groups of those teachers who teach at least two sections of ENC 1101 or ENC 1102. Each teacher was randomly assigned a nontreatment or treatment group in an attempt to control for teacher differences. History and maturation were additional threats to internal validity because of the uncertainty that all groups would be exposed to the same events and that they had similar maturational processes.

Enthusiasm for the use of peer response groups cannot be controlled; some teachers may display a more positive attitude about the technique than others. Some teachers are also better teachers than others; this cannot be controlled although every attempt was made to locate superior teachers through the recommendations of an academic dean or department chair.

Mortality was controlled by using only the scores of the students who completed both the pretest and the posttest of the dependent variable being measured.

There may be a pretest effect on the Daly-Miller Writing Apprehension Measure since all students completed the instrument at the beginning and end of the 16-week period.

Kaywell (1987), in a study employing the same measure, minimized the effect by telling subjects that the test measured writing enjoyment, not apprehension. Since both the nontreatment and treatment groups underwent the same procedure, the pretest effect was probably negligible. Similarly, the Hawthorne effect was minimal, since the subjects' knowledge that they were participating in an experiment was universal.

The pretest and posttest writing samples were controlled for time, topic, and procedure for administration. Only one composition was obtained from each student at the beginning and ending of the study. A slightly modified version of the Paul Diederich Essay Rating Scale was used to determine change in writing ability from these samples. Each paper was rated by four professional holistic scorers and tests of interrater reliability were performed. The scores of the four raters were averaged to provide a single score for each of the two compositions.

Summary

The community college student population is rapidly changing. Adult learners, many of them women over the age of 25, are becoming familiar faces in composition classrooms, and they sometimes bring with them a level of writing apprehension which interferes with their ability to succeed in writing classes and causes the uncertainty of resolving the conflict that their many social roles create.

A positive attitude toward writing is a desirable characteristic; therefore, a reduction of the negative attitude of writing apprehension must occur before extremely anxious writers can overcome their inhibitions about writing and its evaluation.

Concerned community college instructors would likely adopt strategies that are shown to reduce writing apprehension and increase writing achievement with adult learners, but few researchers have at this time investigated specific methods for reducing writing apprehension with these students. Although some apprehension is necessary for students to be conscientious about their work, it has been shown that too much anxiety has negative effects. Research is needed that focuses on reducing levels of writing apprehension while increasing writing achievement and the resultant effects on level of revision. The peer response group technique is intended to alleviate adult learners' writing apprehension as well as increase their writing proficiency as they adopt the role of the writer within and outside of their composition classroom.

CHAPTER II REVIEW OF RELATED LITERATURE

The purpose of this study was to investigate the effects of peer response groups on community college students' levels of writing apprehension, writing achievement, and revision, with special emphasis on students over the age of 25. The review shows that there is a need for specific quantitative research into writing apprehension of older college students, the effectiveness of small group theories such as peer response groups, and the effects of small group strategies and the reduction of writing apprehension on student revision decisions.

The Changing Faces of Community College Students

The makeup of community college student population is changing as the population of the country changes also. According to the Almanac of Higher Education (1991), 63.6 percent of the United State's population is older than age 25, and in Florida that figure increases to 67.9 percent. At the present time, over four million students are enrolled in public two-year institutions, with 43 percent of them enrolled in classes part-time due to jobs or family obligations. In Florida, the figure is even higher--51 percent of them are part time. Florida awards more associate's degrees each year than bachelor's degrees.

Older students are more likely to comprise the part-time picture than are younger students due to work or family obligations. The Report for Florida Community Colleges (1993) lists twice as many part-time students enrolled than full-time students--202,837 as opposed to 105,539. Of those part-time students, 78,957 are male and 123,880 are female.

By the end of the decade Grennan and Schneider predict the percentage of students over 25 years of age will equal that of students under 25 (1989). Watkins (1990) supports that conjecture. He found that in the years 1970 to 1985 the enrollment of students over the age of 25 increased by 114 percent, while the enrollment of students under the age of 25 grew only 15 percent. Hirschorn (1988) concurs. He reports 6 million adults studying for college credit, a figure which comprises 45 percent of all college students. Of these, 67 percent are studying for associate's or bachelor's degrees.

Students over the age of 25 come with their own unique set of fears and anxieties which pose instructional dilemmas for conscientious instructors. Morrison (1994) lists these fears as a lack of basic knowledge or skills, making mistakes, taking tests, writing "good" papers, being slower than younger students, juggling job, family, and school, being the only older person in class, and a general fear of failure. These fears, real or imagined, can affect these students performances in the classroom.

The Almanac of Higher Education (1991) seems to support the fact that many of these fears are real. In a 1989 survey

of two-year college faculty, 85 percent said that older students were seriously underprepared in basic skills such as those required for written and oral communication.

Conversely, the Carnegie Commission estimates that only 10 percent of colleges nationally have taken steps to assist the adult learner in any concrete way (Clark, 1989).

Identity Negotiation Theory and the Older Student

One of the major problems facing the older community college student is the need to negotiate a new role for him- or herself--the role of a member of an academic community. These students are faced with several competing and conflicting roles already, such as worker, spouse, and parent. Brooke (1994) explains a theory of identity negotiation that must occur within these students if they are to experience success in their college classes. Brooke notes that one consistent need within all students is the need to connect the life of thinking, reading, and writing (the so-called life of the mind) with the other lives they lead. One of the strategies instructors can use to help make this connection is that of group learning (Needham, 1994). Needham found that precise group formation can stimulate sparks in the most mundane but necessary subjects.

How does this translate to composition classes? Beaven (1977) states that when peers have regular opportunity to share their writing and to take part in evaluation procedures, they exercise power or control over decisions

that affected their own work. Furthermore, as the dynamics of small group work evolve, peers develop a sense of group inclusion, acceptance, support, trust, reality testing and collaboration. She states that as students share and focus on unique qualities of each paper, they begin to appreciate differences in approach, content, organization, flavor and wording. Then students come to expect differences, and their expectation frees students to say or write their "own things" in their own ways. Further, Brooke (1994) believes that peer response helps writers develop the feelings of social approval necessary to continue writing, an understanding of audience reactions, and their own writing processes, and the ability to revise particular pieces effectively.

Jacobson (1991) notes that although the institutional and instructional environments of most colleges are constructed with the intention of providing the adult learner access to higher education, there are obstacles present resulting from conflicting social forces. The adult writers in her study showed limited growth resulting from their inability to understand the course-related writing as a particular style of discourse characterized by academic community-governed expectations and rules.

Characteristics of Adult Learners

There are three main reasons that adults choose to attend college: those highly motivated from an economic factor, those needing mental stimulation, and those seeking a

"last chance" to gain education (Needham, 1994). Although these motivations may not seem to deviate much from those of younger students, adults in the classroom are, as Needham puts it, a "new breed" of college students.

This new population brings with it its own set of problems, worries, and fears. The number one perceived problem is age difference, which brings with it isolation and fear. A number of students in Morrison's (1994) study reported feeling uncomfortable being outnumbered by the younger students in their composition classes. Many said if they were to do it again, they would take a night class where a higher percentage of students tend to be adults. Younger students report a certain irritation with the willingness of adult students to participate in class discussions. Older students are more outspoken and willing to express their opinions. This made traditional students feel inferior, and these students called for instructors to work to create a more cooperative atmosphere between the two groups. Older students cited the younger group's lack of preparedness and irreverence for and lack of respect for the instructor as major problems of being in a mixed-age classroom.

This competition based on age expands itself to grades. Younger students think older students have only one or two classes to study for, but 85 percent of adult students work full time. They are assumed by their younger classmates to have more time to study. Outside of class, a segregation exists which is typical: there is actually more intermingling

of the ages in class than in the student lounge. Tobin (1991) asserts that the primary thing writing teachers need to do in order to succeed is to establish productive relationships with and between their students.

Courage (1990) studied 24 adult learners in a first-semester basic writing course. He describes the experiences of the students who enter the college classroom as if it were a foreign land with its own peculiar customs. The difficulties encountered by the students as they try to adapt to the academic community's patterns of language use are examined. He states that the course was a meeting ground of cultural and language differences, with tension, conflict, and misunderstanding. He describes the subjects as being constrained by limited resources, relying heavily on peer interpretation of academic language patterns, and generating a de facto curriculum for their life concerns. He points out that there exists an overlay of new language patterns and purposes associated with academic discourse onto old patterns and purposes associated with the language of other communities to which they belong, confirming the struggle of students as they negotiate new identities for themselves.

The study of adult education, andragogy, is a subject of concern for many instructors in higher education. Zemke and Zemke's (1981) article titled "Thirty Things We Know For Sure About Adult Learners" is Training magazine's leading reprint request. In that article, the authors describe adult learners in the classroom, their unique motivations to learn, and the

implications for curriculum development raised by these findings.

In the classroom, Zemke and Zemke point out that adults have something real to lose. Self-esteem and ego are on the line. Adults tend to take errors personally and are more likely to let them affect self-esteem. Evans (1989) agrees with this fact. She states that adult learners forget that they have performed admirably at work and at home for many years; there is discord between their self-image of competence outside the classroom and the student image of incompetence and inferiority. This life experience can be an invaluable asset that Zemke and Zemke assert needs to be acknowledged and tapped and used.

Motivation of Adult Learners

Tough (1968), Aslanian & Brickell (1980), Rubenson (1977), and Miller (1967) have all identified "teachable moments" in the lives of adults, at which point(s) they are most likely to turn to education. Adults seek out learning experiences in order to cope with specific, life-changing events. Marriage, divorce, new jobs, being fired, retiring, being promoted, losing a loved one, or moving to a new city are all examples of a life-changing event that may lead an adult back to school. The more life-changing events an adult encounters, the more likely he or she is to seek out learning opportunities. Learning is a coping response for significant change. Once convinced that the change is a certainty, adults

will engage in any learning that promises to help them cope with the transition. Secondary motivations are increasing or maintaining their sense of self-esteem and pleasure.

Curriculum Design for Adult Learners

Research on lifelong intellectual development conducted by R.B. Catell (1963) suggests that there are two distinct kinds of intelligence that show distinct patterns of age-related development: fluid and crystallized intelligence. Fluid intelligence is innate, stored strings of numbers and facts in short-term memory, spatial relations and abstract reasoning. Crystallized intelligence is the product of knowledge acquisition and experience. Vocabulary, general information, conceptual knowledge, judgment and concrete reasoning are examples of this type of intelligence.

Youth is often thought of as the life stage characterized by an insatiable desire to acquire information, and age as the life stage in which we use information wisely. Catell maintains that wisdom is, in fact, a separate intellectual function that develops as we grow older. Other research into adult developmental stages conducted by Sheehy (1976), and Levinson (1974) reiterate the fact that adulthood is by no means a static period of being "grown-up."

Adults prefer single-concept, single-theory courses that focus heavily on the application of the concept to relevant problems. They need to be able to integrate new ideas with what they already know if they are to keep--and use--the new

information. Information that conflicts sharply with what is already in place is integrated slowly. Also, information that has little "conceptual overlap" with what is already known is acquired slowly. Programs need to be designed to accept viewpoints from people in different life stages and with different value sets. A concept needs to be anchored or explained from more than one value set and appeal to more than one developmental life stage.

Adult learners seem to prefer self-directed, self-designed learning projects seven to one over traditional classrooms led by a professional. They tend to select more than one medium for learning--reading and talking to qualified peers are most frequently cited as good sources for acquiring information. Zemke and Zemke (1981) note that self-direction does not mean isolation. Studies show that self-directed projects involve an average of ten other people as resources, guides, or encouragers. A final implication for instructors of adult learners is that adults should have a hand in shaping the curriculum whenever possible.

Instructional strategies that work with adult learners are based on flexibility and independence. Zemke and Zemke state that adults can learn well (and much) from dialogue with respected peers. They respond to facilitative control from the instructor, such as that employed when small groups are used. Drawing upon previous knowledge on which to base and integrate new knowledge helps adult learners perform well. The learning environment must be physically and

psychologically comfortable. Long lectures, interminable sitting, and the absence of practical opportunities are irritating to adult learners.

Small Group Theory

Although small group techniques and cooperative learning have had a place in education for a number of years, quantitative research is necessary to determine their effectiveness versus "traditional" educational methods. In a 1986 metanalysis of over 2000 studies of writing, Hillocks classified traditional instruction methods into three processes: individualized, presentational, or natural. Instruction which uses peer groups was classified as environmental. The individualized mode of instruction, in which the teacher-student conference is the primary mode of instruction, had a mean effect size of .17. The presentational mode, characterized by lecture and teacher-led discussion about good writing and teacher-only feedback, had a mean effect size of .02. The natural process mode utilizes freewriting about student interests, and feedback from both peer groups and the teacher had a mean effect size of .19. The environmental mode which revolves around peer group activity and student discussion of specific strategies they encounter in their writing had the largest mean effect size of .44.

Hillocks' findings were supported by Atkinson (1993). She conducted a metanalysis of over 700 studies using writing

samples as outcome measures. She reported workshop approaches as the most effective teaching strategies, with a mean effect size of .519. The teaching of inquiry skills had a mean effect size of .452, and computer applications was least effective, with a mean effect size of .318.

Why, then, do many instructors continue to use the least-effective presentational mode coupled with an emphasis on grammar, particularly in the two freshman composition classes? Such rigidity and heavy-handed teacher authority may be paralyzing student writers. Mike Rose (1981) supposes that rigid composing rules might actually restrict fundamentally competent writers, while T.P. Hogan (1980) notes that student interest in writing begins to fall off rapidly in upper elementary grades. Of course, this is when detailed teacher criticism of writing appears. When looking at written language acquisition by second-language learners, Krashen (1984) found that the best approach is not grammatically sequenced, that is, looking at one aspect of grammar at a time. He states "when comprehensible input is supplied in enough variety and quantity, it is hypothesized that acquirers automatically receive far better exposure to and practice on those structures they are ready to acquire next, as compared to a grammatically sequenced approach" (p. 22).

Cooperative and collaborative learning are becoming accepted modes of instruction in higher education. Hart (1993) studied collaborative techniques with college freshmen enrolled in a computer-assisted composition class. He found

that writing proficiency improved significantly in the experimental group utilizing collaborative strategies, more so than the group using computer word processor programs to improve their papers.

Hewlett (1990) studied whether the use of cooperative learning as an alternative instructional strategy at the college level had a significant positive effect upon academic achievement, self-esteem, attitude toward learning, and liking for the subject. He found no significant main or interaction effects for the experimental group which was taught using cooperative learning techniques and the control group, which did not use cooperative strategies.

Peer Response Groups

Response groups, as noted in Anne Ruggles Gere's Writing Groups: History, Theory and Implications (1987), have existed in various forms for over 200 years but have recently gained new status. Gere and Robert Abbott (1985) list peer response's effectiveness in terms of improving critical thinking, organization, and appropriateness of writing; improving usage; increasing the amount of revision; and reducing writing apprehension. They also note that teachers endorse peer response because it develops a better sense of audience, reduces paper grading, exposes students to a variety of writing styles, motivates them to revise, and develops a sense of community. The experience of writing and revising for less-threatening audiences than the teacher,

learning to discriminate between useful and non-useful feedback, and learning to use awareness of anticipated audience responses are additional benefits of peer response groups cited by Berkenkotter (1984).

There are two major reasons to use peer response groups in a composition classroom: exposure and response. Exposure, according to Brooke (1994) is an essential element of a writer's life. He quotes T.S. Eliot to point out the importance of exposure in a writer's life: beginning writers borrow, but mature writers steal. This points out the importance of exposure in a literate life. Positive exposure to other people's ideas, purposes and uses of writing can make writing appealing. "Writers need exposure to other writers and their writing in order to see what's possible, in order to widen the range of what they themselves might try" (p.26). Nancie Atwell, in her notable work In the Middle (1987) uses the dining room table analogy to explain the importance of exposure.

Growing writers need to be surrounded with literate talk. By hearing and taking part in such talk, growing writers come to recognize that other people are, in fact, excited by reading and writing, finding values in certain books and writing projects, and may come to realize their own interest in such activities, too (p.19-20).

Exposure is an essential component for junior high students' successful writing according to Rief (1992) and for senior high students according to Romano (1987). Donald Murray (1990) emphasizes the necessity of exposure for students in college composition classes.

Brooke notes two ways to bring exposure into the class. First, the teacher should set aside time for individuals to share writing and reading with the whole class and with small groups. Student writers need to hear from each other what sorts of things they do read and appreciate and what sorts of things they write. Secondly, when a teacher provides time for small group discussion of writing, they initiate an ongoing forum for exposure. Each time a group meets to share drafts or ideas, the members of the group are functionally exposed to three or four other people's interests in reading and writing, and they are likely to hear why the person wants to write the kinds of pieces she's writing and what sort of pieces this writing reminds her of. Group meetings provide ongoing exposure to the literate activities that the group members value and in which they participate (p. 27-28).

Response is as important as exposure to the beginning writer. There are three reasons writers need response to their writing, according to Brooke. First, getting response to writing brings the writer into a kind of community where writing is valued. Discussion of the ideas a writer is wrestling with, no matter how little they seem connected to the text itself, creates a context where the writer's ideas have social value and aids the identity negotiation of the student from that of novice to academic. Secondly, through listening to the response of others to their writing, writers learn about the reactions of other people, about the various ways different minds make sense of the same passages and deal

with the same writing problems. This makes them better able to predict their readers' reactions while they write and improves their writing processes as well. Last, response to particular drafts can often help writers see new possibilities and problems in their pieces, often leading to revisions that significantly improve writing.

Brooke further states that writing classes need to provide these minimums of response: 1. For short term goals of improving individual text, writing classes need to provide response from other writers, response that provides direct suggestions for how and why the students might develop their texts further. Response should come from several different writers. 2. For long term goals of helping the writer develop more strategies for writing and a better sense of how readers respond to texts, frequent opportunities should be provided for readers to describe how they read a text--such as in movies of the mind (Elbow, 1981) so that writers can hear differences in how minds read. Also, writers need frequent opportunities to reflect on the response they received, to identify the kinds of advice they are getting, and to speculate about what this means for their writing, and to formulate their own plans for what to do next. 3. For long-term goals of helping writers see the social value in the kinds of writing they are doing, classes need to provide frequent opportunities to discuss the ideas and purposes underlying the writing.

Beaven (1977) echoes the importance of both exposure and response to the writer:

Peer evaluation offers each student an opportunity to observe how his or her writing affects others. Peer evaluation provides a kind of motivation not available in other approaches to evaluation. . . as trust and support grow in these small groups, students begin writing for peers, developing a sense of audience, becoming aware of their own voices, and using their voices to produce certain effects in others (150).

The value of peer response groups is both social and academic. Students involved in Brooke's classes stated that the social value of response groups was the single most important precursor to their writing. One student, Peg, shared that writing became something she wanted to do--once she found social approval for what she was attempting. Roger, another student, felt that the groups helped him achieve the ability to critique his own writing and the writing of others. Even for Roger, the short-term task of "fixing" drafts was less important than finding there was social value to certain kinds of writing because other people also used writing in the same ways and finding that his ability to critique writing generally improved through repeated group discussion. McClelland, as far back as 1953, noted that peer evaluation strengthened interpersonal skills needed for collaboration and cooperation as students identified strong and weak passages and revised ineffective ones, as they set goals for each other, and as they encouraged risk-taking behaviors in writing. Peer response groups support the needs identified in work on achievement and motivation, according to McClelland. After basic needs are met, the needs for

affiliation, power, and achievement must be satisfied to produce growth. Achievement is dependent upon fulfillment of the needs for affiliation and power.

Donald Graves (1984), in working with student writers at the elementary level, identified this need for affiliation and power: children learned to write and their writing continued to develop when they had the opportunity to write in a supportive environment.

An additional benefit of peer response was noted by Weiss (1980): "students can learn from assisting one another. . . .Peer critiquing has the benefit of improving student practice without excessive teacher effort--always a key consideration" (p.143).

Richer (1992) examined the effects of two kinds of feedback, peer directed and teacher based, on first year college students' writing proficiency and writing apprehension. He found that the peer feedback group showed a significant increase in writing proficiency; there was no correlation between writing apprehension and writing proficiency between the two groups. He concluded that using peer feedback provides a viable method enabling first year college students to enhance their writing skills and that more emphasis should be placed on this mode of instruction as an alternative to teacher feedback and conferencing.

Quantitative research into the effectiveness of peer response groups is limited. Many research studies dealing with peer groups and the evaluation of writing indicate that

improvement in theme-writing ability and grammar usage when small groups of students engage in peer evaluation may equal or exceed the improvement that occurs under evaluation procedures carried out by the teacher alone (Ford 1973; Lagana 1972; Maize 1952; Pierson 1967; Sager 1973; Sutton & Allen 1964).

Lagana (1972) found that after specific goals for writing improvements had been established, peer evaluation was as effective as traditional teacher evaluation over a 15-week period. He also found that the experimental peer response group improved more than the control group in organization, critical thinking, and sentence revision. The control group, however, registered more improvements in conventions. Ford (1973) found that college freshmen in the peer response experimental group showed significantly higher gains in both grammar and composition ability.

Research on classroom talk and small group work conducted by Sweigart (1991) showed that small group discussion was very effective in improving students' knowledge of the writing task before they began to write. Students indicated a preference for working in situations where talk with peers was necessary.

Peer group work and its effects on adult learners was studied in 1990 by Stephen Fantine. He observed nine nontraditional students in a freshman-level college writing course. The students were taught by a variety of instructional techniques, including teacher modeling,

teacher-student conferencing, and small-group peer review of drafts in progress. Five students demonstrated little change in attitude toward writing. They left the course viewing writing as a difficult and unappealing task. Four students made positive attitudinal changes toward writing and seemed committed to revising any writing to be shared with others.

Hillocks (1986) in his metanalysis of composition research found that students who have been actively involved in the use of specific criteria and/or questions to judge texts of their own and of others write compositions of significantly higher quality than those who have not (p.24). Beaven (1977) notes that the desired growth in writing seems to occur when students work with the same group for an extended period and when there is less structure. Beaven's study contradicts a number of researchers who have found that having some structured criteria to apply in peer groups when evaluating writing results in better papers.

McCarthy (1991) studied the way specific criteria presented by the teacher work their way into student talk about writing in a 5th/6th grade classroom. Her subjects demonstrated that the internalization and use of the criteria depended a great deal upon the teacher's ability to organize and present the information, and they used the criteria most frequently when talking with younger students.

Applying teacher-generated criteria resulted in limited conversation about deep writing issues in Stamm's (1993) study. A class of 7th grade students were subjects in her

research to determine what student-student and student-teacher writing conferences were like and what the differences were in interactions between female and male writers and between high-and low-achieving writers. She found that the structure of talk in the student-student conference was influenced by the Content Conference Form provided by the teacher. Responders rarely identified problems for writers or offered constructive criticism. Female writers talked more, and helped writers improve their writing more, than male writers did. High-achieving writers talked much more, and made many more suggestions to help writers improve their writing, than low-achieving writers did. However, students interacted more freely with each other than they did in the student-teacher conference. In the latter type of conference, teachers talked much more than the writers, and engaged in more talk with female and high-achieving writers than with boys and low-achieving writers.

Vygotsky's (1978) theory of the zone of proximal development explains some of the reasons for the success of small groups. He notes that during play, a child behaves beyond his or her average age and daily behavior. Play allows the child to explore life in a relatively supportive environment. Even though learners are ultimately responsible for their own conceptual development, the student does not learn in isolation. Other learners can create a supportive learning environment that encourages students to raise their perspectives and ask new questions.

Can students be effective judges of each others' texts? Wallace (1991) raises doubts. In a study of students developing, implementing, and judging intentions in writing, he found that students were not good judges of the effectiveness of their own and other students' texts in meeting application criteria supplied by the teacher. In two of his four analyses, the students showed a bias in favor of their own texts over the texts written by other students. They also identified problems in other students' texts that they could not see in their own texts.

Some group work involves students writing collaboratively. Williams (1993) examined the kinds of talk and behaviors that occur in group writing situations. He reported that most eighth graders in collaborative writing groups wrote effective persuasive essays while engaging in on-task and off-task talk and behavior. Presumably adult learners would benefit from the group work, since they might be more inclined to exhibit on-task behavior.

Adult Learners and Small Group Work

Small group work such as participating in peer response groups fits the criteria for successful curriculum design for adult learners. Murray (1985) points out that writing means self-exposure. No matter how objective the tone or how detached the subject, the writer is exposed by words on the page. It is natural for students to feel such exposure. That fear is best relieved if the writer and fellow students look

together at a piece of writing to see what the piece of writing is saying. . . and if they listen to the piece of writing with appropriate detachment. He further states that sharing writing is best done orally. When students read their papers aloud they hear the voices of their classmates without the interference of mechanical problems, misspellings, or poor penmanship. It is perhaps more important for the writer to hear his or her own voice convey intensity, drive, energy, and more. This means a piece of writing comes from what it says and how it says it.

Judy (1980) continues Murray's ideas. He says that the teacher should not be the only reader of student writing. Student's comments to one another can be at least as helpful as the teacher's, while at the same time being less threatening. People naturally seek out an audience for their writing. Initial shyness about making writing public should not be confused with a desire to keep things private. When students write for real readers--their classmates or people outside the class--they pay more than usual attention to matters of form, style, and correctness. Writing for an audience allows students to see such matters as an aid to reaching readers rather than simply as a teacher's concern or obsession. Lauer (1980) agrees. She sees criticism from peers as providing valuable guidance for revision. Students do respond as an audience to their classmates' writing. In laboring to communicate valuable insights in genuine writing

situations, they see the importance of control over conventions.

Research by Cullum (1991) seems to support Lauer's position. The subjects in his study of collaboration in the writing classroom showed a great improvement in sentence length, use of passive voice, use of the verb to be, and an overall number of writing problems.

Murray (1985) explains this group approach as a community of writing. The community of writers wants to help the writer help the piece of writing find its own meaning.

A case study of one older adult involved in a college-level English class was the focus for Mary Phillip's (1991) research. After observing the subject for 26 weeks, she suggests that a writer can learn from another writer regardless of context or of either writer's station of learning.

Elaine Hobby (1989) has conducted much research on adult women and small group work. Since twice as many adult students at two-year colleges are women, her work merits a closer look. Women in her study varied in age from the late teens to mid sixties, most falling within the thirty to forty-five age range. Most were examples of the life-changing events theory discussed earlier. All of them felt they were at a point of transition in their lives: they had lost or were bored with their jobs; their children had started school or left home; they were divorced or approaching retirement. She found small group work remarkably successful because it

encourages students to talk together. The classroom became a place where students talked, when for most of these women education had meant listening to the teacher talk. In small groups, they realized they were not alone--the room was full of women who felt that they had either forgotten how to think or never knew how in the first place. Elements of their lives they had identified as personal they soon found out were commonplace to others. They began to recognize that others in the class could be a source of support and shared analysis, not competition. Hobby states that because they are women they were responsive to one another's needs and sensitive to each other's insecurities; they encouraged each other in speaking up in class and in writing essays. The few men who were in her composition class tried to dominate discussion and were less skilled at cooperation and giving support. Hobby notes that we live in a society where no one is considered stupid if they cannot plan in advance what clothes three children and their father must have clean to wear in a week--a very complex task performed effortlessly by many women--but in a society that thinks people are stupid if they cannot write essays.

Barbara Cambridge (1989) also points out why small group work is beneficial for women. She says women are essentially interactional, relational, participatory, and collaborative as a result of the forces that have shaped their lives. Writing and small group discussion helps women to bridge the

gap from silence to private discourse to public pronouncements in class.

Deborah Tannen (1989) states the difference in the way men and women verbally communicate in terms of public talk and private talk. Men are more accustomed to being public purveyors of information. Women, on the other hand, are private emotion-expressers.

Writing Apprehension

The Development of the Construct

The term "writing apprehension" was coined by Daly and Miller (1975a) to describe an individual's tendency to respond favorably or unfavorably toward writing situations in order to provide empirical evidence on an attitude that affects writing behavior. Their research was based on communication apprehension which seriously affects a large proportion of the population. Prior studies in communication apprehension have shown that highly apprehensive people tend to choose occupations they perceive as requiring little communication (Daly & McCrosky, 1975), tend to be less inclined to achieve in general (Giffin & Gilham, 1971), and tend to have lower self concepts than others (McCrosky & Daly, 1974).

Some people appear unusually fearful or hesitant about writing and avoid writing situations whenever possible. "In classroom situations," said Daly and Miller (1975a), "they will be the individuals who consistently fail to turn in

compositions, who do not attend class when writing is required, and who seldom enroll voluntarily in courses where writing is known to be demanded" (p. 244).

The reluctance or resistance highly apprehensive students show toward writing was the subject of Nancy Hayward's(1991) research. She states that there is no single profile of a resistant writer, but many of the resistant writers in her study exhibited two distinctly different reactions--either fight or flight. When instructors suggested that they modify some part of their papers, they reacted with open defiance and hostility toward the instructor, or with withdrawal, usually resulting in incomplete or hastily completed work, lack of revising, absenteeism, or refusal to interact in the class.

Daly and Miller's Writing Apprehension Measure (1975a) is an empirically based, standardized self-report instrument intended to measure an individual's level of writing apprehension. The original measure consisted of 63 items which dealt with respondents' perceptions of their anxiety about writing. It included statements about their beliefs, likes and dislikes, and attitudes about evaluations by self, peers, teachers, and professionals. A Likert scale format was employed using five possible choices from strongly agree to strongly disagree. All items with factor loadings above .60 were selected to compose the initial instrument, with these 26 items accounting for 46 percent of the total variance (Daly & Miller, 1975a). The obtained reliability of the

measure was .940, the test-retest reliability for over a week was .923, and the mean score was 79.28 with a standard deviation of 18.86 (Daly & Miller, (1975a). Studies lasting over three months have produced test-retest reliability coefficients of greater than .80 (Daly, 1985).

The Writing Apprehension Measure

After development of the Writing Apprehension Measure, Daly attempted to provide evidence for the predictive validity of the measure by looking at some of the effects of writing apprehension. He looked at the interrelationship between writing apprehension and message intensity (Daly & Miller, 1975b); SAT scores, success expectation, willingness to take advanced courses, and sex differences (Daly & Miller, 1975c); occupational choice (Daly & Shamo, 1976); message encoding (Daly, 1977); writing competency (Daly, 1978); academic decisions (Daly & Shamo, 1978); teacher role expectancies of the apprehensive writer (Daly, 1979); and self-esteem and personality (Daly & Wilson, 1980). Daly found that highly apprehensive individuals wrote less intense messages, did not expect to succeed in writing courses, and chose occupations and/or classes that required little or no writing. Teachers reported better expectancies for high apprehensive males and low apprehensive females; thus it seems that teachers expected males not to enjoy writing but they expected that females liked to write. There was a low correlation between the Writing Apprehension Measure and the SAT-verbal test. Students enrolled in advanced composition

classes are usually low apprehensives who are confident writers and enjoy the writing act.

Writing apprehension has been studied by several researchers in regards to teachers' levels of apprehension. Claypool (1980) found a significant negative correlation between a teacher's level of apprehension and number of writing assignments made. Highly apprehensive high school teachers assigned only an average of seven writing assignments per year as compared to 19.9 assigned by low apprehensive teachers. One study found a positive relationship between a teacher's apprehension level and concern that students use standard English (Gere, Schuessler, & Abbott, 1984). However, a larger number of researchers have suggested that a teacher's emphasis on rule rigidity and "perfectionism" make students fearful of writing and can actually result in "blocked" writers (Rose, 1980; Newkirk, 1979). Little causal research has been conducted to determine whether highly apprehensive teachers tend to transfer their feelings onto students by doing the same kinds of "conventions" that made them apprehensive in the first place (Kaywell, 1987).

Writing Apprehension and Writing Achievement

Several studies have indicated that apprehension is associated with writing performance. In a survey of elementary and secondary teachers, poor skill development was the most common reason cited for writing apprehension (Daly, 1979). High apprehensives write compositions with fewer

words, convey less information, use less qualification, use lower levels of language intensity, and have less command over usage and written conventions when compared with low apprehensives (Book, 1976; Daly, 1977; Daly & Miller, 1975c; Faigley, Daly & Witte, 1981; Garcia, 1977; Reed, Vandett, & Burton, 1983). Measures written by high apprehensives were rated significantly lower in quality than those written by low apprehensives (Book, 1976; Daly, 1977; Daly & Miller, 1975c). Causality has not been proven in any of these studies: writing apprehension does not necessarily cause poor writing nor does poor writing cause writing apprehension. Each probably affects the other.

Results from a study by Marx (1991) confound the issue even further. In a study of over 200 freshman composition college students, developmental and advanced students expressed many of the same attitudes about writing, while the middle group stated attitudes more expected from students of lower ability.

In 1978 Daly conducted research on 3,000 undergraduates enrolled in a basic composition course in order to detect the actual skill or competency differences that exist between high and low apprehensive writers. Respondents completed the Writing Apprehension Measure and a multiple-choice test of writing skill designed to assess knowledge about mechanics and grammar. Daly found that high apprehensives did not perform as well on the test of writing skills as low

apprehensives. In every case, the direction of the means favored the low apprehensives.

One hundred ten undergraduates were the subjects in Faigley, Daly, and Witte's 1981 study of the effects of writing apprehension on writing competency and performance. Differences again favored the low apprehensives in all but two measures (paragraph pattern and sentence pattern subtests). The subjects took the Test of Standard Written English, the English Composition Test, the SAT verbal test and vocabulary subtest, and the language mechanics and paragraph comprehension sections of the McGraw-Hill Reading Test.

In the writing performance portion of the study, highly apprehensive individuals wrote significantly shorter narrative-descriptive compositions which were rated as less syntactically mature or fluent than the compositions of their low apprehensive counterparts (Faigley, Daly, & Witte, 1981). Interestingly, there was no effect for apprehension on argumentative essays. The authors concluded that highly apprehensive writers have less command over usage and writing conventions and are unable to develop ideas as well as low apprehensives.

Walker (1992) completed a study to determine whether audience adaptation activities would affect writing apprehension and writing achievement. The study was conducted on over 400 eighth-grade students, who participated in 15 activities designed to increase their awareness of audience

as they wrote, an emphasis also often suggested as a benefit of peer response groups. Walker found no significant difference between the experimental and comparison groups in the amount of change in writing apprehension from the beginning to the end of the 13-week study. The experimental group exhibited a significant increase in writing achievement while the change for the comparison group was not significant. There was no significant difference in postachievement for differing initial levels of writing apprehension, and approximately 15 percent of the eighth graders were classified as highly apprehensive. The study suggests that increasing an awareness of audience will significantly increase writing achievement, but not decrease writing apprehension.

Changing Writing Apprehension

Based on the logic that a positive attitude about writing is a desirable characteristic and highly apprehensive individuals should be helped to lose some of their unhealthy anxiety about writing, some researchers have focused on the modification of writing apprehension. Daly (1985) suggests that modifications usually take one of two forms: examining the effects of educational programs, such as a particular writing course, on writing apprehension and identifying and testing various strategies aimed at alleviating writing apprehension.

In a landmark study in 1980, Fox investigated the effects of two methods of writing instruction on writing

apprehension and writing quality. One method of instruction was set up as a workshop format where there was free writing, structured peer group activities in response to writing, language problem-solving exercises, and instructor-student conferences. The other method of instruction was more traditional. Students received instructor lectures about writing, participated in teacher-led question/answer and discussion periods, did structured writing activities, and received evaluation by the instructor exclusively. Both groups showed a significant decrease in writing apprehension. However, Fox found that the student-centered workshop approach reduced apprehension significantly more than the conventional teacher-centered approach. There were no significant differences in terms of writing quality for either group.

Pfeifer (1981) studied the effects of peer evaluation and personality on the writing anxiety and writing ability of college freshmen. She found no significant effect in regards to peer evaluation on either writing anxiety or performance, and she noted that students with identical apprehension levels did not necessarily produce the same quality of writing. She attributed this difference in quality to personality differences. Pfeifer concluded that reducing writing anxiety did not necessarily improve writing ability.

Thompson (1979) studied freshmen college writers to determine if her language study approach decreased writing apprehension and improved writing ability. The approach,

which included discussions of procrastination, standard English and dialects, the history and formation of language, and the connection between reading and writing, resulted in decreased apprehension and increased writing ability. Thompson suggested that if students discover their own "personal writing rhythm" then they will be less apprehensive about writing.

Weiss and Walters (1980) designed formative writing tasks to answer two questions: "how well am I learning something, or how well can I express something being learned?" (pp. 4-5). They sought to find out whether an increase in the number of traditional writing tasks or an increase in the number of nontraditional writing tasks in content courses would also increase apprehension. Formative writing tasks were assigned in 15 classes, five were used as control classes. Apprehension levels in 11 of the 15 experimental classes decreased, but not significantly. Writing apprehension levels decreased more for the experimental classes than the control classes, but not significantly.

As Smith (1984) and Hillocks (1986) point out, little quantitative research has been conducted on the effectiveness of specific instruction in reducing writing apprehension. Teachers should seek to help those students who are highly apprehensive about writing, although some apprehension is probably necessary to write an acceptable paper. In a study of professional adults, Aldrich (1982) found that 49 out of

89 people reported negative feelings about writing. She concluded that the number of negative responses to her questionnaire" seem to indicate that dread and apprehension are probably preventing otherwise competent people from approaching writing tasks confidently" (p. 300). The goal of writing teachers should be to decrease writing apprehension and increase writing ability at the same time.

Free writing, writing whatever comes to mind for five minutes, was the focus of Sorensen's (1993) study. Working under the supposition that an increase in ungraded writing opportunities would bring about a decrease in writing apprehension and an increase in writing fluency, Sorensen's subjects wrote freely for five minutes five times per week. She noted that writing apprehension scores decreased, composition quality for highly apprehensive subjects increased, and results were mixed for fluency, supporting two of her hypotheses.

Causes of Writing Apprehension

Procrastination, inability to organize materials, an over-adherence to perfectionism, and impatience at the editing and proofreading stages are several causes of writing apprehension suggested by Cope (1978). Cope believed that effective treatment of writing apprehension cannot begin until the cause has been established. Once the cause of a student's writing apprehension has been found, teachers should spend time with their students on writing as process, time-management, and organizational skills.

In a study netting somewhat unusual results, Powers, Cook, and Meyer (1979) found that compulsory writing caused apprehension. Their study included students enrolled in a basic college level composition course, half under the impression that the course was compensatory and the other half believing it was a regular course. Both groups were given five to six compositions to write. The papers received typical teacher-only feedback. The students in the compensatory section had a significant increase in apprehension; the other group also had an increase but not at a significant level. These findings were unusual because they were not consistent with other findings. Fox (1980) conducted a study in which students were also forced to write, but they experienced a decrease in apprehension. Smith (1984) noted that "it seems far more likely that the method of evaluation, not compulsory writing, was responsible for the increase in writing apprehension" since other studies with compulsory writing show decreased apprehension (p. 4).

Teaching Product over Process: Student Attitude Toward Writing

Beginning with Janet Emig's 1971 classic study of the composing process of twelfth graders, the teaching of writing began to shift from a product-oriented to a process-oriented approach. Emig observed the behavior, including attitude, of four students while they were writing; she also examined how they wrote rather than what they wrote. She found that

students refrained from showing their real feelings because of their fear of the teacher's criticism.

Student attitude toward writing became more of a concern to researchers in the mid 1970s. Metzger (1976) studied a seventh grader, a tenth grader, and a college student while writing. These students expressed writing as a joyless chore and they viewed their teachers as only proofreaders or editors. Metzger pointed out that classroom experiences with writing do not encourage students to consider writing as a pleasant, profitable or purposeful activity. He added that teachers should provide students with many opportunities for pleasurable writing experiences. Hogan (1980) also suggested that teachers should make special efforts to capture students' interest in writing in grades six through nine, which may help preserve students' enjoyment of writing.

Shaughnessy (1977) studied the writing problems of college freshmen. She found that after several false starts and fear of error, they produced sentences which were "hopelessly entangled" (p. 7). Shaughnessy advocated focusing on the process approach to writing instruction. She felt the product-oriented approach centered too much on surface errors.

Ann Berthoff (1981) proposed that teaching the peripherals of writing such as grammar, spelling, and punctuation is not teaching writing. She said that it is a misconception to think that writing can be factored into subskills. In addition, she stated that by dwelling on the

correctness of student papers, teachers may unconsciously be encouraging students to produce trivial papers or to stop writing altogether.

Holbrook (cited in Emig, 1983) described the effect of the over-emphasis on correctness:

Children become so terrified of putting down a word misspelled, particularly an unfamiliar word, that they don't put down any words. I have seen it happen to a child of 8, who wrote long marvellous stories. After a year with a teacher who wrote 'Please be more tidy,' 'Your spelling is awful,' 'Sloppy'--and never a good word, she stopped altogether. She wrote little lies, a sentence at a time, in a 'diary.' 'Coming to school today I saw an elephant.' It wasn't true. But that was all she was damn-well going to write--neat, complete, grammatical, well-spelt, short, and essentially illiterate lies. For her the word had been divorced from experience. The deeper effect is to make the learning process one separated from sympathy and creative collaborative interest in exploring the wonder of being. (p. 95)

Teachers should notice the value of the expression, of the message in writing. Failure to notice because of too many mistakes may have disastrous effects. "If their instructors continue to emphasize an avoidance of error, then students will finally learn to avoid as many errors as possible by not writing at all," Maimon (1979) wrote about college freshmen, a statement especially true if those freshmen are adult learners with fragile self-concepts on the line.

Berthoff (1981) reasoned that no student will care very much about learning usage and mechanics unless he or she cares about the composition being edited. Emig (1983) added that there is very little evidence to support that the persistent pointing out of specific errors in student papers leads to an elimination of those errors. In addition, no

student will be able to revise well until they can write comfortably and fluently (Kirby & Liner, 1980), although a study by Walberg and Ethington (1991) indicates that those students with low apprehension and high motivation to write receive more requests and opportunities to write for teachers. They were also more likely to show their writing to peers.

Student attitude toward writing plays a definite role in writing growth. No matter how skilled or capable students are in writing, if they believe they will do poorly or if they choose to avoid writing whenever possible, their skill matters little. Daly (1985) claimed that writing desire is just as important as writing skill:

An individual's attitude about writing is just as basic to successful writing as are his or her writing skills. For no matter how skillful the individual may be as a writer, without a willingness to engage in writing one can expect little more than the atrophy of composing skills. A positive attitude about writing is associated with, and may even be a critical precursor of, the successful development and maintenance of writing skills. (p. 44)

In a study of 150 12th-grade students, Lester (1991) looked at attitude toward usage in writing and concluded that the motivational level of writers at all learning levels was dependent upon writer anxiety, confidence in revision techniques, and interaction with the teacher as a mentor.

Learning to write is a sensitive process, and teachers should offer lots of praise and encouragement during the process. Instructors should teach the conventions of writing after self confidence has been developed. Then there will be

plenty of time to concentrate on the "peripherals" of writing (Kaywell, 1987).

Revision

Although revision seems to be one of the easier aspects of the composing process to study because it leaves a record, the truth is that revision is a complex activity. Researchers have sought to understand this complexity in two ways: by examining the effects of revision and by speculating on the causes of revision.

Revision and the Composing Process

One of the benefits of the writing-as-process movement has been the inclusion of revision as an important part of the composing process rather than as a proofreading or editing stage done after the paper is essentially complete, a view initially suggested by Rohman and Wlecke (1964). Revision, by literal breakdown of the word, is re-visioning, or reseeing the composition. Hayes and Flower (1980) point out that in their model of composing, which consists of planning, translating, and reviewing, reviewing (or revision) is the key to improving the quality of the text. Revision is not a simple process. As Hayes and Flower assert, it can be recursive. A writer may discover a gap that may lead to a reader's failure to comprehend a particular point. The writer then generates ideas and composes whatever is necessary to fill the gap. This can interrupt the entire "process" of the process approach to writing, but ultimately leads to a

reader's understanding of a composition closer to the author's original intentions and meanings, hence, a better composition.

Nancy Sommer's (1980) research on the effects of revision strongly suggests that the linear model of composing is overly simplistic. Fennick (1991) studied prose fiction writers and concluded that all her subjects revised as they drafted and all relied on collaborators at some point in the process for feedback. For experienced writers as well as for beginners, revision can be fun or it can be excruciating, but it is always there, a part of writing, early, late, and always.

Causes of Revision Decisions

Two of the most important studies on revision in the past decade have been those done by Flower and Hayes and Sommers. Linda Flower and John R. Hayes (1980) have attempted to study the causes of revision by soliciting verbal protocols that provide a running account of a writer's conscious activities during composing. Their evidence suggests that writers move back and forth among the various activities of composing and that expert writers frequently review what they have written and make changes in the text while still writing.

Sommers (1980) demonstrated that writers of different abilities make different kinds of revisions. She drew distinctions between the revisions of skilled and unskilled writers according to the length of their changes and the

types of operation. Sommers used the same categories of operations--deletion, addition, substitution, and rearrangement--that Chomsky used to group transformations.

Adolescent writers' revising strategies were the focus of Andrews-Beck's (1989) research. She found that writers value overall length, sentence length and complexity, word choice, and elaboration of content. For those categories, writers' perceived strategies were usually consistent with strategies actually used. Perceived strategies were not consistent with use in two categories: writers said they reduced error and improved appearance as writer-perceived quality rose, but errors actually increased and appearance changed little, suggesting that solitary revising is not always a reliable way to improve compositions, at least with younger students.

Revision Classification Systems

Other studies examining the effect of revision changes on the meaning of a text were problematic because of the artificial systems of classification employed. The 1977 National Assessment of Educational Progress used broad categories of meaning such as organizational, stylistic, continuational, and holistic to classify revisions. Literary scholars have tried to classify revisions as well. In an extensive study of well-known authors, Hildick (1965) described the revision changes of Lawrence, Hardy, and James. He developed six categories of revision decisions: tidying-up changes in grammar or punctuation, roughening-up changes such

as loosening speech patterns, changes for accuracy in expression or argument, sweeping structural alterations, ideological determined changes, and miscellaneous changes. Neither the National Assessment system nor the Hildick classifications are of help in studying revision because most of the categories overlap (Faigley & Witte, 1981).

One of the most useful classification systems for studying revision was developed in 1981 by Faigley and Witte. Their Taxonomy of Revision Changes is based on whether new information is brought to the text or whether old information is removed in such a way that it cannot be recovered through drawing inferences. Changes that do not bring new information to a text or remove old information are called surface changes. These include formal changes such as spelling and punctuation and meaning-preserving changes like addition, deletion, and substitution. Meaning changes are divided into microstructure changes, changes in which all concepts in a text are included, even those that can be inferred, and macrostructure changes, which are major revision changes in the "gist" of the text.

After applying their taxonomy to groups of expert adult writers, advanced college students, and inexperienced students, Faigley and Witte determined that advanced students, not the expert adults, were the most frequent revisers. The inexperienced writers' changes were overwhelmingly surface changes. The advanced students and the expert adults' changes were more evenly distributed. About 24

percent of the advanced students' changes and 34 percent of the expert adults' changes were meaning changes. In some respect, the advanced students revised more like the inexperienced writers, making surface changes about twice as often as the expert adults. But in meaning changes, the advanced students revised more like the expert adults, especially in macrostructure changes, where the frequencies of changes by advanced students and expert adults were similar. The authors conclude that

Successful revision results not from the number of changes a writer makes but from the degree to which revision changes bring a text closer to fitting the demands of the situation. . . . Revision cannot be separated from other aspect of composing, especially during that period in which writers come to grips with the demands of the particular writing situation. Success in revision is intimately tied to a writer's planning and reviewing skills. . . . Inadequate reviewing of extant working drafts often results from poor conception of the audience's needs, which prevents writers from revising their texts to suit the audience's needs and wishes. Somehow we must teach our students to distance themselves from what they have written, to get them to see it again, then revise. (p. 411)

Peer Response Groups and Revision: A Natural Combination

Willis (1993), in her book Deep Revision, states that since revision fundamentally consists of trying to look at a paper with new eyes, it follows that one excellent approach is to bring in literally new eyes: other readers. She continues "there is nothing more important than the response of a good reader in making the plunge into deep revision" (p. 51).

Willis asserts that the writer's peer group is the best vehicle for thoughtful and meaningful revision of papers, and

that only recently have we come to believe that writing is a solitary activity.

The solitary artist is a relatively recent model. . . dating from the Romantic movement. Many sculptors, for example, are dependent upon craftspeople to convert their models to monumental casts of bronze, and one of the twentieth century's most characteristic art forms, film, is a group effort. . . . Most artists need to seek out community at some point; whether consciously or not, we all collect ideas and revise our own work based on the responses of others. (p. 56)

Peer response groups may be ideally suited to providing the kind of feedback adult writers need. In a peer group, Willis states, you not only get responses to your own writing, you also learn by seeing someone else's work developing, by hearing about someone else's struggles, challenges, and plans. "We are wrong to think of writing as an activity done only in solitude. Much of it is, but always with the echoes of previously written words in our ears, and always with at least a vague image of a potential reader" (p.37). Writer's groups offer support, critiquing, or both. Other people can offer companionship through the maze of revision as well as concrete suggestions on how to do it.

Written peer criticism was the topic of Droge's (1991) research involving college English classes. He found that students perceived written peer review as helpful, with benefits that included increased audience awareness and the creation and fostering of productive revisions and strategies for revision. Using Bridwell's (1980) coding scheme, he found that peer reviewers made revision suggestions mostly at the sentence/length, usually requesting the addition of more

information. The operation suggested most frequently was substitution/alteration. Student writers listened to their peer reviewers and revised at a rate of 81 percent at the level length and in the exact operation suggested in the comments.

Farrell (1977) found that for boys, in particular, peer group evaluation and revision was more effective than conferences with a tutor, teacher lecture, or no instruction situations. Farrell's findings contrast with those of Hobby and Cambridge stated earlier, where women were found to perform better than men in peer groups.

In Hillock's (1986) metanalysis of revision research, he states that for all peer group studies, when operationally clear objectives were in use the groups were successful. When the objectives were not so clear, studies incorporating a combination of teacher and peer feedback have a small but consistent advantage over those with teacher feedback alone.

Peer response groups also free up a teacher, providing more time for conferences or planning. Willis (1993) states that it seems true that much more writing and involvement with writing takes place in a classroom where students are editing one another rather than if the teacher is acting as copy editor for every draft of every paper that gets written. Copy editing is not the best use of a teacher's time.

Operations of Revision

In Bridwell's 1980 landmark study of the revision processes of 12th grade students, she found 56 percent of the

revisions at the surface or lexical levels, 18 percent at the phrase level, and 19.61 percent at the sentence or multi-sentence levels. She recorded no revisions at the text level--indicating that the students took more opportunity to revise at the lower levels than at the higher sentence or multi-sentence levels.

Addition, it seems, is the most frequent operation of revision performed by writers of all ages. Bridwell found that the second drafts written by the high school seniors were significantly longer than the first. Sommers (1979) indicated that addition was the major action of revision undertaken by adult, experienced writers. And Kamler (1980) reported that successive drafts of compositions by elementary school students were longer than the original. This is presumably because the reexamination of a manuscript prompts associations or memory searches which result in additions to the original (Hillocks, 1986).

Sommers (1979) compared the revising strategies of eight college freshmen and seven experienced adult writers. She denoted four levels of change: word, phrase, sentence, and theme, and four operations: deletion, substitution, addition, and reordering. She found that the greatest number of revisions by college students came at the word and phrase level, with deletion and substitution being the most frequent operations. Adult writers revised most often at the sentence level and addition was the major operation. Their revisions distributed over all levels, suggesting that experienced

writers perceive more alternatives than do younger or more inexperienced writers.

Stiles (1977), however, found that weaker writers are not totally devoid of concern for higher levels of revision like changes to content and organization. She studied eight basic college freshmen seriously deficient in basic writing skills and reported that while her students were preoccupied with mechanics, they had a secondary concern for organization and arrangement.

The importance of criteria to be applied in revision activities should be of major concern to educators. In Hillocks (1986) review of revision research, he found that engaging writers actively in the use of criteria applied to their own or others' writing results in not only more effective revisions but in superior first drafts. Most studies showed significant gains for experimental groups using various types of criteria, suggesting that the criteria learned act not only as guides for revision but as guides for generating new material. Cohen and Scardamalia (n.d.) used criteria called diagnostic statements with sixth graders and reported significant gains in the quality of revisions made and in the frequency of revisions, especially in "idea" revisions. Rosen (1974), Wright (1976) and Kemp (1979) used various sets of criteria with college students. In their studies, the experimental groups made greater gains than the control groups, but the differences were not significant.

Whether students revise differently for disciplines other than English was the subject of Young's (1992) research. She focused on the revisions students made to two essays written for freshmen composition and one paper written for another discipline to determine what prompted students to make revisions and how they compared across disciplines. Results indicated that seven concerns motivated revision in all disciplines: professor influence, desire for clarity, influence of perceived audience, polishing of written product, conformity to perceived discipline standards, and length requirement. Young concluded that students view revising in all disciplines in much the same way. Operations of revision included surface level changes and microstructure level changes rather than macrostructure level changes which would affect the meaning of the total text, affirming Faigley and Witte's (1981) findings. This was true of English and classes in other disciplines.

Operating at the surface level of revision changes is not just a problem of American students. Tagong (1991) studied the strategies Thai students employed in the revision of their English and Thai essays. They made very few changes in essays of either language. Most of the revisions were made at the meaning-preserving level, employing three principal operations: additions, deletions, and substitutions.

Summary

One of the major concerns of English educators has been, for many years, to seek a better way to teach writing to students. Community college instructors find that the task is further complicated by the need to reach students of varying ages, abilities, and apprehension levels.

Research indicates that adult learners are usually highly motivated and may have fragile self-concepts about their role as students. Their preference of self-directed, teacher-facilitated curriculum activities suggests that small group strategies may be successful in increasing their knowledge and aiding in identity negotiations as they begin to perceive themselves as members of an academic community.

Writing apprehension is a problem with people of all ages, even leading some highly apprehensive people to avoid writing at all costs, even when selecting a job. Peer response groups have been used to produce a significant reduction in writing apprehension for students of all ages, but especially in college freshmen.

Studies on revision have reported that revision decision changes differ according to the writer's level of experience and comfort with writing. Novice writers make frequent surface level meaning-preserving cosmetic changes, such as correcting spelling and punctuation. Expert writers revised words, sentences, and passages at a higher meaning-changing level. Further research is needed to determine whether

students' participation in weekly peer response groups changes the frequency, type, and level of revision decisions they make.

CHAPTER III RESEARCH DESIGN AND METHODOLOGY

The purpose of this research was to investigate the effect of peer response groups on community college students' writing apprehension levels and revision strategies. Special emphasis was given to students who are over age 25. The sample was composed of four intact ENC 1101 classes and four intact ENC 1102 classes, both required freshman level English classes. All eight classes were taught at Florida community colleges which had similar student populations. Treatment classes used peer response groups in addition to teacher feedback on writing assignments. Nontreatment classes featured teacher-only feedback on writing assignments. The following research hypotheses were tested separately for ENC 1101 and ENC 1102 classes:

- H₁: There will be no significant differences ($p < .05$) in mean adjusted posttest scores of nontreatment and treatment groups on writing apprehension, writing achievement, and revision measures.
- H₂: There will be no significant effect ($p < .05$) of age on the adjusted posttest scores of nontreatment and treatment groups on writing apprehension, writing achievement, and revision measures.
- H₃: There will be no significant interaction effect ($p < .05$) of age and treatment on the adjusted posttest scores of nontreatment and treatment groups on writing apprehension, writing achievement, and revision measures.

The Daly-Miller Writing Apprehension Measure was administered at the beginning and ending of a 16-week period and was used to measure initial writing apprehension levels, and any changes in these levels, of the freshman composition students. Compositions were written by students on one of two topics at the beginning and ending of the 16-week period and were used as pretest and posttest measures for determining gain or loss in students' achievement in writing. The same compositions were analyzed using Faigley and Witte's Taxonomy of Revision Changes (1981) to determine changes in revision decisions. An analysis of covariance was performed for each of the dependent variables. A simple bivariate correlation determined the strength of variable relationships

Design of the Study

Although random sampling is the preferred method of conducting experimental research, a quasi-experimental design was selected for this study because of the necessity of using intact classes. The research design chosen for this study was the nonequivalent control-group pretest-posttest design (Huck, Cormier, & Bounds, 1974).

The research design was structured so that (a) two college freshman composition courses were used: ENC 1101 and ENC 1102; (b) eight groups were studied; (c) each group was measured at the same time on three dependent variables before the treatment was applied to the treatment groups; (d) each group was measured at the same time after the treatment

was applied to the treatment groups; and (e) the subjects were not randomly assigned to the eight groups. This design was followed for ENC 1101 and ENC 1102 classes for a total of eight intact classes.

Age of subjects and treatment/nontreatment groups were the two independent variables studied. Three dependent variables were examined for treatment effects: (a) the Daly-Miller Writing Apprehension Measure was administered before and after treatment to assess any changes in apprehension levels between groups, (b) an expository composition containing a final copy and previous drafts was written before and after treatment and holistically scored to assess any changes in writing proficiency between groups, and (c) the same compositions were analyzed using Faigley and Witte's Taxonomy of Revision Changes to determine any treatment effects on the frequency and depth of revision changes.

The design was chosen to facilitate research conducted in natural classroom settings in a standard sixteen-week college semester. Since randomization of subjects was not possible due to the use of prescheduled subjects and classes, every effort was made to use groups that were as equivalent as possible. Pretest, treatment, and posttest procedures were carried out at the same time, thus controlling for history and maturation.

At the community college level, eight instructors participated in the study for a total of eight intact groups. These teachers were full-time tenured faculty members of

their institutions and taught at least two sections of ENC 1101 or ENC 1102 per semester. By eliminating the need for an instructor to conduct both nontreatment and treatment classes, the threat of teacher differences was controlled.

The four community colleges included in this study represented a balanced sample of community college students in the state of Florida. Because four of the teachers in the study taught ENC 1101 and four taught ENC 1102, this study had representation from both levels of required freshman composition classes. It is safe to conclude that the findings in this study could be generalized to populations and courses similar to those described herein.

The Sample

Eight instructors, with one freshman level composition course each, were involved in this study. The sample was composed of eight intact classes: four ENC 1101 and four ENC 1102 classes. One hundred ten students enrolled at Central Florida Community College, North Florida Junior College, St. Johns River Community College, and Santa Fe Community College completed pre- and posttest measures.

The composition of students according to course, age and sex is presented in Table 3-1 and 3-2.

TABLE 3-1Composition of Subject Sample by Course and Age

Course	Total No.	Under 25	Over 25	Percent Under 25	Percent Over 25
ENC 1101	55	33	22	61	39
ENC 1102	55	39	16	70	30
Total	110	72	38	65	35

TABLE 3-2Composition of Subject Sample by Course and Sex

Course	Total No.	No. Males	No. Females	Percent Males	Percent Females
ENC 1101	55	22	33	40	60
ENC 1102	55	17	38	30	69
Total	110	39	71	35	65

The composition of students according to nontreatment and treatment groups is presented in Table 3-3.

TABLE 3-3

Composition of Subject Sample by Group

Course	Nontreatment	Treatment	Total
ENC 1101	26	29	67
ENC 1102	23	32	61
Total	49	61	110

Description of the Instruments

The Writing Apprehension Measure

Writing apprehension was assessed by subjects' completion of the 26-item Daly-Miller Writing Apprehension Measure (1975a). The statements focus on respondents' perceptions of their anxiety about writing, their likes and dislikes about writing, and their responses to self, peer, teacher, and professional evaluation of their writing. The measure uses a Likert-type scale with five levels of responses for each statement ranging from "strongly agree" to "strongly disagree." Scores are obtained by using the formula $\text{Writing Apprehension} = 78 + \text{Positive Scores} - \text{Negative Scores}$ (Daly & Miller, 1975a, p. 246). In this study, a low score of

49 indicated a highly apprehensive writer while a high score of 117 indicated a low apprehensive, or extremely confident, writer.

The Daly-Miller Writing Apprehension Measure is used in most research involving writing apprehension and has been found highly reliable across diverse subject samples. The reliability coefficient of the measure has been close to .94 in research using the instrument (Daly, 1985, p. 45). Test-retest reliability ranges from .92 after a one-week period (Daly & Miller, 1975b) to greater than .80 after a three month period (Daly, 1985) (Lauer & Asher, 1988).

Writing Achievement

Achievement in writing was determined by the holistic scoring of pretest and posttest compositions using a slightly modified version of the Diederich Scale (Diederich, 1974). The scale, based on judgments of the writing of college freshmen, was developed by the researchers at the Educational Testing Service (ETS) and is regularly used to evaluate the quality of compositions. Diederich's factor-analysis study of teacher's reasons for their judgments when grading compositions is responsible for the validity of the scale (Myers, 1980).

Holistic scoring assumes that the whole of a piece of writing is greater than any of its parts, and no aspect of writing skill can be judged independently. English teachers may not agree on the quality of particular traits, but they can rate papers in much the same way when judging a paper as

a whole. Holistic scoring, according to Myers (1980), is still the best way to assess writing. The College Level Academic Skills Test, the State of Florida Writing Assessment Test, and Advanced Placement Tests use holistic scoring as their means of assessment, as do most other formal evaluations of writing proficiency.

A modified version of the Diederich scale is presented below and was used in this study. On the original scale, Ideas and Organization received twice the number of points as the other items based on the emphases of the schools at which the instrument was developed. In this study, all items received equal weight due to the possibility of different emphases in each college's composition program. Handwriting was removed from the original scale for the purposes of this study.

	Low		Middle		High	
<u>General Merit</u>						
Ideas	1	2	3	4	5	
Organization	1	2	3	4	5	
Diction	1	2	3	4	5	
Style	1	2	3	4	5	_____
<u>Mechanics</u>						
Usage	1	2	3	4	5	
Punctuation	1	2	3	4	5	
Spelling	1	2	3	4	5	_____
					Sum	_____

If a student received the lowest possible score on everything, the total would be 7; the highest possible score would be 35.

The Taxonomy of Revision Changes

One of the most useful classification systems for studying revision was developed in 1981 by Faigley and Witte. The Taxonomy of Revision Changes they devised is based on whether new information is brought to the text or whether old information is removed in such a way that it cannot be recovered through drawing inferences. Changes that do not bring new information to a text or remove old information are called surface changes. These include formal changes such as spelling and punctuation and meaning-preserving changes like addition, deletion, and substitution. Meaning changes are divided into microstructure changes, changes in which all concepts in a text are included, even those that can be inferred, and macrostructure changes, which are major revision changes in the "gist" of the text.

Faigley and Witte tested their system until they were satisfied that it could be applied reliably, with two researchers reaching over 90 percent agreement on types of revisions. They then assigned a numerical code to each category to facilitate analysis of revisions. When a revision change spanned more than one sentence, each sentence was analyzed separately. The resulting frequencies of categorical revision changes per 1000 words in final drafts and total revision changes per 1000 words in final drafts was reported.

Data Collection Procedure

Permission for this study was obtained from the Human Subjects Committee of the University of Florida's Institutional Review Board. Eight composition instructors participated in the study: one from Central Florida Community College, one from North Florida Junior College, five from St. Johns River Community College, and one from Santa Fe Community College. All teachers participated in a brief training session at which time the "teacher instructions" were explained (see Appendix C).

Teachers administered the writing apprehension pretests during the second week of the semester. During the pretest period, students were instructed to write a composition on one of two prompts: Advantage/Disadvantage of Belonging to a Group in High School, or the Pressures of Being an Only/Oldest/Middle/Youngest Child. Students were given one week to complete the essays, and turned in their rough drafts and final copies to their instructor. The posttest activity followed the same procedure during the next-to-the-last week of the semester with only a change in composition topic. Groups which initially wrote on topic one wrote on topic two and vice versa.

Classes designated as treatment participated in 30-minute peer response groups during class once a week. The study lasted for 16 weeks. Groups read their papers aloud and then discussed their writing assignments following the

guidelines Brooke (1994) proposed for small group discussions about writing. An effort was made to mix high and low apprehensive writers in the groups, as well as mixing students under and over the age of 25.

The Rating Procedure

Compositions were coded by the subjects based on the last four digits of a phone number. The investigator compiled an identification list which identified each student by pretest, posttest, and composition codes. Those students who took the pretest but no posttest and those who took the posttest but no pretest were eliminated from this study.

Compositions were read and scored by four professional holistic scorers. Papers were divided into four folders and randomly shuffled and read so that the readers were unaware of whether the papers are entry or exit level, as Hake (1986) described the phenomenon of exit papers receiving lower scores when raters knew the category.

Each scorer read 220 papers in two Saturday sessions, one week apart. The four scorers were trained together through the University of Florida, had worked together for several years, had participated on state-funded holistic scoring events such as the State of Florida Writing Assessment Test (WAT) and the College Level Academic Skills Test (CLAST), had been teachers, and had their master's degrees.

The four scorers were provided with instructions defining each point on the modified version of the Diederich Rating Scale used in the study. Raters were trained together and read together in the same room under common direction, which, according to Myers (1980), is the most reliable method of scoring writing samples. The investigator chose high, middle, and low model papers for each category. These papers were duplicated and served as practice papers for the readers. After each group of practice papers had been rated, they were compared. A head scorer was appointed to monitor and resolve scores on a paper that varied widely in the categories. Training was conducted until the average difference between ratings was less than two points.

Each scorer read each composition and scored it on the scales; thus, each paper was read at least four times. Scorers marked the scale only; no marks were made on the papers. After the paper was finished, the scorer put each sheet on the bottom of the stack until all papers had been rated. Once a stack of papers had been read and scored, readers passed the folder to the reader on the right. After the complete scoring of a folder, the investigator summed totals and notified the head scorer of any discrepancies in scoring. The head scorer made the final decision regarding extreme scores. Scorers took breaks and were supplied meals and snacks in order to control for rater fatigue.

Data Analysis

The independent variables for this study were course and age. The three dependent variables were (a) level of writing apprehension, (b) writing achievement, and (c) depth and frequency of revision.

Two nontreatment and two treatment groups were used for both ENC 1101 and ENC 1102 classes. An analysis of covariance was performed on the adjusted posttest means of the two treatment and two nontreatment groups based upon pretest scores. A simple bivariate correlational analysis by course and group was conducted to determine the strength of relationships among the variables. The .05 level of significance was selected for all analyses of data.

CHAPTER IV DATA ANALYSIS AND RESULTS OF THE STUDY

This study was designed to test the effect of peer response groups on community college students' levels of writing apprehension, writing achievement, and revision decisions, with special emphasis on students who were over age 25. This chapter contains the statistical treatment of the data and findings relative to (a) the effect of peer response groups on writing apprehension, (b) the effect of peer response groups on writing achievement, and (c) the effect of peer response groups on students' revision decisions at the community college level.

The Statistical Treatment of the Data

Introduction

The study was limited to eight freshman level community college composition classes: four ENC 1101 classes and four ENC 1102 classes. For each course, there were two nontreatment groups and two treatment groups. Students in the treatment groups participated in peer response groups for thirty minutes per week. Pre- and posttests measuring writing apprehension, writing achievement, and revision decisions were collected from the students in all eight groups.

Table results are reported from reduced models because no instructor interactions occurred upon first analysis. The test for pretest by group was also nonsignificant, thus the slopes of the regression lines for pre- on posttest were assumed homogenous for the treatment groups, allowing interpretation of the F statistic for treatment effect.

Writing Apprehension

One of the major purposes of this study was to determine the effect of peer response groups on students' levels of writing apprehension. To determine if an effect existed, students completed the Daly-Miller Writing Apprehension Measure at the beginning and ending of a sixteen-week period. These tests were used as pre- and posttest measures for determining gain or loss in students' apprehension in writing.

The analysis of data involved two major steps. First, apprehension scores were calculated for each student. Second, an analysis of covariance (ANCOVA) was performed to determine the following: (a) if a significant difference existed among the adjusted mean apprehension scores of subjects in the two groups, (b) if a significant effect of age existed on the adjusted mean posttest apprehension scores of subjects, and (c) if a significant interaction effect of age and treatment existed on adjusted posttest apprehension scores of subjects.

Hypotheses for the study were stated in null form, and tested separately for ENC 1101 and ENC 1102 courses. A summary of the findings follows each hypothesis.

Analysis of Apprehension Data

A computation of total apprehension scores and the difference for each student was performed. In ENC 1101, the mean apprehension pretest score is 77.73 and the standard deviation is 18.81. The mean apprehension posttest score is 82.31 and the standard deviation is 23.57. For ENC 1102, the mean pretest apprehension score is 85.65 and the standard deviation is 19.52. The mean apprehension posttest score for ENC 1102 is 83.01 and the standard deviation is 22.31. A comparison of pre- and postapprehension means by course and group is shown in Table 4-1.

The trend of scores reveals that in ENC 1101, students' apprehension can be slightly reduced using the method investigated. In ENC 1102, however, apprehension increased slightly after administration of the treatment.

To determine the significance of gain or loss in students' apprehension in writing, various statistical procedures from the Statistical Analysis System (SAS) were performed to test the null hypotheses.

Hypothesis 1. There will be no significant differences ($p < .05$) among the posttest writing apprehension scores of the nontreatment and treatment students.

Hypothesis 2. There will be no significant effect ($p < .05$) of age on the adjusted posttest writing apprehension scores of the nontreatment and treatment students.

TABLE 4-1
Pre- and Postapprehension Means by Course and Group

Course	N	Mean	SD
<u>ENC 1101</u>			
Nontreatment Preapprehension	26	78.692	22.444
Nontreatment Postapprehension	26	78.769	28.919
Treatment Preapprehension	29	76.068	15.151
Treatment Postapprehension	29	85.862	17.326
<u>ENC 1102</u>			
Nontreatment Preapprehension	23	85.956	19.065
Nontreatment Postapprehension	23	82.565	20.659
Treatment Preapprehension	32	85.343	20.147
Treatment Postapprehension	32	83.468	23.750

Hypothesis 3. There will be no significant interaction effect ($p < .05$) of age and treatment on the adjusted posttest writing apprehension scores of the nontreatment and treatment students.

The ANCOVA design was used to control statistically any initial differences present in the students which might confound differences among the four groups per course. The covariate was the score on the writing apprehension pretest. The dependent measure, the score on the Daly-Miller Writing Apprehension Measure posttest, was adjusted on the basis of the covariate. After checking all possible two-way interactions, the model was reduced to include significant

variables. The results of this analysis are given in Table 4-2.

TABLE 4-2
Summary of ANCOVA Postapprehension

Source	SS	df	MS	<u>F</u>	PR> <u>F</u>
<u>ENC 1101</u>					
Pretest	3939.078	1	3939.078	9.02	0.069*
Treatment	1707.543	1	1707.543	8.97	0.006*
<u>ENC 1102</u>					
Pretest	6533.489	1	6533.489	48.88	0.001*
Treatment	8888.158	1	8888.158	34.01	0.001*

* $p < .05$

In Table 4-2, the calculated F - ratio for nontreatment groups in the ENC 1101 classes is 9.02, which is significant at the .05 level of probability. The model accounts for 23% of the variance. The calculated F - ratio for treatment groups in ENC 1101 classes is 8.97, which is significant at the .05 level of probability. The model accounts for 26% of the variance. For ENC 1102 nontreatment classes, the calculated F - ratio is 48.88, which is significant at the .05 level of probability. The model accounts for 20% of the variance. The calculated F - ratio for ENC 1102 treatment classes is 34.01, which is significant at the .05 level of probability. The model accounts for 29% of the variance. The posttest writing apprehension scores reject the hypothesis

that there is no significant difference in the mean performance of subjects among the groups.

A simple bivariate correlational analysis was performed to detect the strength of the age/writing apprehension relationship. For ENC 1101 treatment groups, age correlated with writing apprehension at a moderate 0.456. Thus, for this group, the older the student, the higher the degree of writing apprehension. Results of the correlational analysis are presented in Table 4-3.

TABLE 4-3
Summary of Correlational Analysis for Age and Writing
Apprehension

Group	Preapprehension	Postapprehension
<u>ENC 1101</u>		
Nontreatment	-0.009	-0.123
Treatment	-0.272	0.456*
<u>ENC 1102</u>		
Nontreatment	0.070	0.139
Treatment	0.144	0.122

* $p < .05$

In short, although the posttest writing apprehension scores reject the null hypothesis that there is no significant difference in the mean performance of subjects among the groups, age appears to correlate directly only with ENC 1101 treatment subjects' scores.

Writing Achievement

In addition to investigating the effect of peer response groups on students' writing apprehension, the purpose of this study was to investigate the effect of peer response groups on students' writing achievement. Two papers, one at the beginning and one at the end of a sixteen-week period, were written by students on assigned topics to determine if an effect existed. Students' papers were used as pre- and posttest measures for determining gain or loss in students' proficiency in writing. Papers were read by four readers using a modified version of the Diederich Essay Rating Scale (see Appendix B) whereby paragraphs were evaluated on seven items in two main areas: general merit and mechanics. Pre- and posttest papers were collected from the students in all eight classes.

The analysis of the data involved three major steps. First, a comparison of the ratings of Rater A, Rater B, Rater C, and Rater D was made to determine the degree of relationship among the four ratings. Cautions were taken to prevent raters from knowing which papers were pretests and which were posttests. Second, a computation of total scores and the difference for each student was performed to identify growth scores of each student. Third, an ANCOVA was performed to determine the following: (a) if a significant difference in writing achievement existed among the adjusted mean posttest scores of treatment and nontreatment students, (b)

if a significant effect of age existed on the adjusted posttest scores of subjects in writing achievement, and (c) if a significant interaction effect of age and treatment existed on adjusted posttest writing achievement scores of students.

Hypotheses for the study are stated in null form. Following the results of the comparison of raters, a summary of the findings follows each hypothesis.

Comparison of Raters

All 220 papers, 110 pretest papers and 110 posttest papers were used in comparing the ratings of Rater A, Rater B, Rater C, and Rater D. A correlation of total scores on pre- and posttests and on each section of the Diederich Essay Rating Scale--general merit and mechanics--using the Pearson Product r was performed to determine rater reliability. Total paper pretest scores ranged from 17 to 35 for Rater A, from 17 to 33 for Rater B, from 13 to 34 for Rater C, and from 12 to 34 for Rater D. Total paper posttest score ranged from 18 to 35 for Rater A, from 16 to 34 for Rater B, from 13 to 35 for Rater C, and from 12 to 34 for Rater D. Scoring reliabilities were quite high ($r = +.68$ to $+.82$) for summed scores.

Analysis of Composition Data

A computation of total composition scores and the difference for each student was performed. Appendix J shows for each 1101 and 1102 student the total composition pre- and posttest scores and growth scores. A comparison of pre- and

posttest writing achievement means by course and group is shown in Table 4-4.

TABLE 4-4
Pre-and Postachievement Means by Course and Group

Course	N	Mean	SD
<u>ENC 1101</u>			
Nontreatment Preachievement	26	23.000	4.621
Nontreatment Postachievement	26	26.923	4.881
Treatment Preachievement	29	21.000	6.551
Treatment Postachievement	29	26.928	6.868
<u>ENC 1102</u>			
Nontreatment Preachievement	23	21.478	7.044
Nontreatment Postachievement	23	23.913	4.999
Treatment Preachievement	32	22.000	5.364
Treatment Postachievement	32	25.156	5.199

To determine the significance of gain or loss in students' achievement in writing, various statistical procedures from SAS were performed to test the null hypotheses.

Hypothesis 1. There will be no significant differences ($p < .05$) among the posttest writing achievement scores of the nontreatment and treatment students.

Hypothesis 2. There will be no significant effect ($p < .05$) of age on the adjusted posttest writing achievement scores of the nontreatment and treatment students.

Hypothesis 3. There will be no significant interaction effect ($p < .05$) of age and treatment on the adjusted

posttest writing achievement scores of the nontreatment and treatment students.

The ANCOVA design was used to control statistically any initial differences present in the students which might confound differences among the four groups per course. The covariate was the score on the essay writing achievement pretest. The dependent measure, the score on the writing achievement posttest, was adjusted on the basis of the covariate. After checking all possible two-way interactions, the model was reduced to include significant variables and rerun. The results of this analysis are given in Table 4-5. In Table 4-5, the calculated F - ratio for nontreatment groups in the ENC 1101 classes is 6.89, which is significant at the .05 level of probability. The model accounts for 23% of the variance. The calculated F - ratio for treatment groups in ENC 1101 classes is 14.88, which is significant at the .05 level of probability. The model accounts for 25% of the variance. For ENC 1102 nontreatment classes, the calculated F - ratio is 9.30, which is significant at the .05 level of probability. The model accounts for 20% of the variance. The calculated F - ratio for ENC 1102 treatment classes is 11.51, which is significant at the .05 level of probability. The model accounts for 29% of the variance. The posttest writing achievement scores reject the hypothesis that there is no significant difference in the mean performance of subjects among the groups.

TABLE 4-5
Summary of ANCOVA Postachievement

Source	SS	df	MS	<u>F</u>	PR> <u>F</u>
<u>ENC 1101</u>					
Pretest	130.449	1	130.449	6.89	0.015*
Treatment	431.102	1	431.102	14.88	0.007*
<u>ENC 1102</u>					
Pretest	174.395	1	174.395	9.30	0.006*
Treatment	227.095	1	227.095	11.51	0.002*

* $p < .05$

A bivariate correlational analysis was performed and determined that subject age correlated with writing achievement at a moderate 0.491 for ENC 1101 treatment groups. Thus, for ENC 1101 treatment groups, the older the student, the higher the grade recorded on the writing achievement pretest. After application of the peer response group treatment, age did not show as strong a correlation with achievement. This finding indicates that the treatment increased writing achievement in students of all ages in ENC 1101 classes. ENC 1102 treatment and nontreatment groups showed no correlation between subject age and writing achievement scores on the pre- or posttest writing measures. Results of the correlational analysis are presented in Table 4-6.

TABLE 4-6
Summary of Correlational Analysis for Age and Writing
Achievement

Group	Preachievement	Postachievement
<u>ENC 1101</u>		
Nontreatment	0.174	0.224
Treatment	0.491*	0.304
<u>ENC 1102</u>		
Nontreatment	0.244	0.030
Treatment	0.208	0.215

* $p < .05$

Revision Decisions

Introduction

The third purpose of this study was to determine the effect of peer response groups on students' revision decisions. To determine if an effect existed, students completed a rough draft and final copy of two papers, one at the beginning of a sixteen-week period and one at the end. These papers were used as pre- and posttest measures for determining levels of complexity in students' revision decisions.

The analysis of data involved two major steps. First, revision scores were calculated for each student based on three domains of Faigley and Witte's Taxonomy of Revision Changes: formal changes, meaning-preserving changes, and

microstructure changes. No evidence of macrostructure changes, Faigley and Witte's fourth domain, was observed. Second, an analysis of covariance (ANCOVA) was performed to determine the following: (a) if a significant difference existed among the adjusted mean revision scores of subjects in the two groups, (b) if a significant effect of age existed on the adjusted mean posttest revision scores of subjects, and (c) if a significant interaction effect of age and treatment existed on adjusted posttest revision scores of subjects.

Hypotheses for the study were stated in null form, and tested separately for ENC 1101 and ENC 1102 courses. A summary of the findings follows each hypothesis.

Analysis of Revision Data

A computation of revision scores on the three domains and the difference for each student was performed. To determine the significance of gain or loss in students' revision in writing, various statistical procedures from SAS were performed to test the null hypotheses.

Hypothesis 1. There will be no significant differences ($p < .05$) among the posttest revision scores of the nontreatment and treatment students.

Hypothesis 2. There will be no significant effect ($p < .05$) of age on the adjusted posttest revision scores of the nontreatment and treatment students.

Hypothesis 3. There will be no significant interaction effect ($p < .05$) of age and treatment on the adjusted posttest revision scores of the nontreatment and treatment students.

A computation of total revision scores and the difference for each student was performed. In ENC 1101, the mean revision pretest score is 2.34 and the standard deviation is 3.34. The mean revision posttest score is 2.73 and the standard deviation is 2.95. For ENC 1102, the mean pretest apprehension score is 1.10 and the standard deviation is 1.39. The mean apprehension posttest score for ENC 1102 is 2.02 and the standard deviation is 2.37. A comparison of pre- and postrevision means by course, group, and type is shown in Table 4-7.

The ANCOVA design was used to control statistically any initial differences present in the students which might confound differences among the four groups per course. The covariate was the score on the revision pretest. The dependent measure, the score on the revision posttest, was adjusted on the basis of the covariate. After checking all possible two-way interactions, the model was reduced to include significant variables and rerun. The results of this analysis are given in Table 4-8.

In Table 4-8, the calculated F - ratio for formal changes in the ENC 1101 nontreatment groups is 8.37, which is significant at the .05 level of probability. The model accounts for 22% of the variance. The calculated F - ratio

for formal changes by the ENC 1101 treatment groups is 6.47, which is significant at the .05 level of probability.

TABLE 4-7
Pre-and Postrevision Means by Course and Group

Course	N	Mean	SD
<u>ENC 1101</u>			
Nontreatment Prerevision			
Formal changes	26	2.615	3.634
Meaning-preserving changes	26	4.692	7.498
Microstructure changes	26	0.769	1.632
Nontreatment Postrevision			
Formal changes	26	2.520	2.770
Meaning-preserving changes	26	3.840	4.687
Microstructure changes	26	0.320	1.069
Treatment Prerevision			
Formal changes	26	0.869	1.345
Meaning-preserving changes	26	4.689	4.841
Microstructure changes	26	0.413	1.150
Treatment Postrevision			
Formal changes	26	2.551	2.667
Meaning-preserving changes	26	6.214	4.755
Microstructure changes	26	0.964	1.815
<u>ENC 1102</u>			
Nontreatment Prerevision			
Formal changes	23	0.869	1.289
Meaning-preserving changes	23	2.304	2.457
Microstructure changes	23	0.130	0.457
Nontreatment Postrevision			
Formal changes	23	1.347	0.457
Meaning-preserving changes	23	3.956	4.300
Microstructure changes	23	0.391	1.305
Treatment Prerevision			
Formal changes	32	1.468	1.436
Meaning-preserving changes	32	1.906	2.739
Microstructure changes	32	0.000	0.000
Treatment Postrevision			
Formal changes	32	2.281	3.102
Meaning-preserving changes	32	3.656	2.695
Microstructure changes	32	0.562	1.389

The model accounts for 26% of the variance. The calculated F - ratio for meaning-preserving changes in the ENC 1101 nontreatment classes is 0.20, which is not significant at the .05 level of probability. The model accounts for 22% of variance. For 1101 treatment classes, the F - ratio for meaning-preserving changes is 2.61, which is not statistically significant at the .05 level. The model accounts for 25% of the variance. Microstructure changes received a calculated F - ratio of 1.67 in ENC 1101 nontreatment classes, which is not significant at the .05 level. Treatment classes in 1101 had a calculated F - ratio of 2.16 for microstructure changes, which is not significant at the .05 level.

For ENC 1102 nontreatment classes, the calculated F - ratio of formal changes is 0.69, which is not significant at the .05 level of probability. The model accounts for 20% of the variance. The calculated F - ratio for formal changes of 1102 treatment classes is 0.29, which is not significant at the .05 level of probability. The model accounts for 29% of the variance. The calculated F - ratio for meaning-preserving changes in 1102 nontreatment classes is 7.47, which is significant at the .05 level of probability. The model accounts for 20% of the variance. In 1102 treatment classes, the F - ratio for meaning-preserving changes is 1.69, which is not significant at the .05 level. On the final measure, microstructure changes, the F - ratio for ENC 1102 nontreatment classes is 51.24, which is significant at the

.05 level. The model accounts for 20% of the variance. No observations of microstructure changes were made in ENC 1102 treatment classes. The posttest revision scores reject the hypothesis that there is no significant difference in the mean performance of subjects among the groups on formal changes in ENC 1101 classes and on meaning-preserving and microstructure changes in 1102 classes. The null hypothesis was retained for meaning-preserving and microstructure changes in 1101 classes and formal changes in 1102 classes.

TABLE 4-8
Summary of ANCOVA Postrevision Changes

Source	SS	df	MS	F	PR>F
<u>ENC 1101</u>					
Pretest					
Formal	48.797	1	48.797	8.37	0.008*
Meaning-Preserving	4.001	1	4.001	0.20	0.657
Microstructure	1.887	1	1.887	1.67	0.209
Treatment					
Formal	39.565	1	39.565	6.47	0.017*
Meaning-Preserving	57.497	1	57.497	2.61	0.118
Microstructure	6.998	1	6.998	2.16	0.153
<u>ENC 1102</u>					
Pretest					
Formal	1.538	1	1.538	0.69	0.416
Meaning-Preserving	104.341	1	104.341	7.47	0.012*
Microstructure	26.798	1	26.789	51.24	0.001*
Treatment					
Formal	2.991	1	2.991	0.29	0.591
Meaning-Preserving	12.356	1	12.356	1.69	0.204
Microstructure	0.000	0	0.000	0.00	0.000

* $p < .05$

Subject age had no significant effect in ENC 1101 or 1102 treatment groups. However, for ENC 1101 nontreatment groups, age correlated with meaning-preserving revision decisions at a moderate 0.531 for the pretest and 0.392 for the posttest. The older students made more meaning-preserving changes than did the younger students. Results of the correlational analysis are presented in Table 4-9.

TABLE 4-9
Summary of Correlational Analysis for Age and Revision
Decisions

Group	Prerevision	Postrevision
<u>ENC 1101</u>		
Nontreatment		
Formal	-0.079	-0.197
Meaning-Preserving	0.531*	0.392
Microstructure	-0.178	-0.158
Treatment		
Formal	-0.126	0.060
Meaning-Preserving	0.187	0.064
Microstructure	0.075	0.108
<u>ENC 1102</u>		
Nontreatment		
Formal	-0.132	0.248
Meaning-Preserving	-0.113	-0.239
Microstructure	-0.153	0.076
Treatment		
Formal	-0.250	-0.034
Meaning-Preserving	0.188	0.053
Microstructure	0.000	0.453*

* $p < .05$

Summary

Tables of the analysis of the data generated by subjects in both of the two courses were presented in Chapter IV. A summary of findings by course level is presented in Table 4-10. The relationship of the findings to the hypotheses by course is summarized in Table 4-11.

The analysis of the apprehension, achievement, and revision decision data reveals that there is a significant difference in the adjusted mean performance of subjects among the nontreatment and treatment groups for ENC 1101 and ENC 1102 classes. For revision decisions, ENC 1101 classes specifically noted differences in formal changes. ENC 1102 classes differed significantly on meaning-preserving and microstructure changes.

A bivariate correlational analysis of age with the three measures revealed a moderate positive correlation with writing apprehension, writing achievement, and revision decisions in ENC 1101 classes. For ENC 1102 classes, age correlated only with revision decisions.

TABLE 4-10
Summary of Findings by Course Level

Course	Group	Measure	Significance
<u>ENC 1101</u>			
	Nontrt	Postwriting Apprehension	significant
	Nontrt	Postwriting Achievement	significant
	Nontrt	Postrevision Formal	significant
	Nontrt	Meaning-Preserving Postrevision	not significant
	Nontrt	Microstructure	not significant
	Trt	Postwriting Apprehension	significant
	Trt	Postwriting Achievement	significant
	Trt	Postrevision Formal	significant
	Trt	Postrevision	
	Trt	Meaning-Preserving Postrevision	not significant
	Trt	Microstructure	not significant
<u>ENC 1102</u>			
	Nontrt	Postwriting Apprehension	significant
	Nontrt	Postwriting Achievement	significant
	Nontrt	Postrevision Formal	not significant
	Nontrt	Postrevision	
	Nontrt	Meaning-Preserving Postrevision	significant
	Nontrt	Microstructure	significant
	Trt	Postwriting Apprehension	significant
	Trt	Postwriting Achievement	significant
	Trt	Postrevision Formal	not significant
	Trt	Postrevision	
	Trt	Meaning-Preserving Postrevision	not significant
	Trt	Microstructure	not significant

TABLE 4-11
Summary of The Relationship of Findings to Hypotheses by
Course

Hypotheses	Course	Status
H ₁ : There will be no significant differences ($p < .05$) in mean adjusted posttest scores of nontreatment and treatment groups on writing apprehension, writing achievement, and revision measures.	ENC 1101	rejected
	ENC 1102	rejected
H ₂ : There will be no significant effect ($p < .05$) of age on the adjusted posttest scores of nontreatment and treatment groups on writing apprehension, writing achievement, and revision measures.	ENC 1101	rejected
	ENC 1101	rejected
H ₃ : There will be no significant interaction effect ($p < .05$) of age and treatment on the adjusted posttest scores of nontreatment and treatment groups on writing apprehension, writing achievement, and revision measures.	ENC 1101	retained
	ENC 1102	retained

CHAPTER V
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

A summary of the study followed by a discussion of the findings as they relate to (a) the effect of peer response groups on students' levels of writing apprehension, (b) the effect of peer response groups on students' writing achievement, and (c) the effect of peer response groups on students' revision decisions is presented in this chapter. Conclusions and recommendations are based on these findings.

Summary

This study was designed to test the effect of peer response groups on community college students' levels of writing apprehension, writing achievement, and revision decisions, with special emphasis on students who were over age 25. The following questions were posed in this study:

1. Will the use of peer response groups affect students' levels of writing apprehension, writing achievement, and revision decisions?
2. Will the use of peer response groups affect the levels of writing apprehension, writing achievement, and revision decisions of those students over 25 years of age?

The design of the study was the Nonequivalent Control-group Pretest-posttest Design with two nontreatment groups and two treatment groups for each course, ENC 1101 and ENC 1102. Subjects used in the study were 110 students attending St. Johns River, Santa Fe, and Central Florida community colleges and North Florida Junior College. Eight instructors participated in the study, providing eight intact classes for study. The protocol for data collection was as follows:

1. Subjects in the nontreatment groups were asked at the beginning and ending of a 16-week period to write a composition including rough draft and final copy on one of two topics and to complete the Daly-Miller Writing Apprehension Measure.
2. Subjects in the treatment groups were asked at the beginning and ending of a 16-week period to write a composition including rough draft and final copy on one of two topics and to complete the Daly-Miller Writing Apprehension Measure. These students also met in peer response groups for 30 minutes per week to discuss and gather feedback on their writing assignments.

Pretest and posttest data were collected from all eight classes--four ENC 1101 and four ENC 1102 classes--before and after their involvement with the study. The amount of change occurring by participation in peer response groups in the areas of writing apprehension, writing achievement, and revision decisions was measured and compared for significant

differences. The following null hypotheses were tested for ENC 1101 and ENC 1102 courses:

Hypothesis 1. There will be no significant differences ($p < .05$) among the posttest writing apprehension, writing achievement, and revision scores of the nontreatment and treatment students.

Hypothesis 2. There will be no significant effect ($p < .05$) of age on the adjusted posttest writing apprehension, writing achievement, and revision scores of the nontreatment and treatment students.

Hypothesis 3. There will be no significant interaction effect ($p < .05$) of age and treatment on the adjusted posttest writing apprehension, writing achievement, and revision scores of the nontreatment and treatment students.

Each subject's writing apprehension was assessed by the 26-item Daly-Miller Writing Apprehension Measure. This instrument has been found to be highly reliable and valid (Daly & Miller, 1975a) and is used in most research dealing with writing apprehension (Smith, 1984, p.1).

Each subject's writing achievement was assessed by the holistic scoring of pretest and posttest compositions using a modified version of the Diederich Scale (Diederich, 1974, pp. 53-58). Compositions were written by students on one of two topics (See Appendix E) at the beginning and ending of a 16-week period and used as pretest and posttest measures for determining growth in students' writing achievement. Four trained and experienced raters evaluated each composition

following procedures suggested by Myers (1980). The Pearson Product Moment Correlation was used to measure rater reliability.

Each subject's revision decisions were assessed by the scoring of pretest and posttest compositions using Faigley and Witte's Taxonomy of Revision Changes (1986) in the domains of formal changes, meaning-preserving changes, and microcosm changes. No evidence of the fourth domain, macrocosm changes, was observed. Compositions were written by students on one of two topics (See Appendix E) at the beginning and ending of a 16-week period. Rough drafts and final copies of the compositions were collected and analyzed to determine revision decision data.

The analysis of covariance design was used to control statistically any initial differences in the students which might confound differences among the four groups of students from ENC 1101 and ENC 1102 classes. The dependent variables, the scores on the writing apprehension, writing achievement, and revision decision posttests, were adjusted on the basis of the covariates. The covariates were the scores on the apprehension, achievement, and revision pretests. This was possible because the same instrument was used for measurement in all three cases. The .05 level of significance was selected for all analyses of data.

Conclusions

Writing Apprehension

The use of peer response groups did significantly affect students' levels of writing apprehension in both ENC 1101 and ENC 1102 treatment classes by reducing writing apprehension in the first class and raising it slightly in the second class. The writing apprehension scores rejected the hypothesis that there was no significant difference in the adjusted posttest scores of subjects in the nontreatment and treatment groups. In addition, the age of the subject appeared to correlate with writing apprehension in only the ENC 1101 classes.

Writing Achievement

Writing achievement scores rejected the hypothesis that there was no significant difference in the adjusted mean posttest scores of subjects in nontreatment and treatment groups. All groups increased their achievement scores significantly over the course of the study, but treatment groups in ENC 1101 classes showed the largest gain in achievement. Age correlated positively with achievement among ENC 1101 students on the pretest measure.

Revision Decisions

ENC 1101 and ENC 1102 subjects and treatment levels differed significantly on three of the six revision decisions: formal changes for ENC 1101 subjects and meaning-

preserving and microstructure changes for ENC 1102 subjects, thus rejecting the null hypothesis on these measures and retaining it for meaning-preserving and microstructure changes in ENC 1101, and formal changes in ENC 1102. Age of the subjects correlated with meaning-preserving revision changes in ENC 1101 only.

Discussion

Students entering college composition classrooms as freshmen exhibited varying levels of writing apprehension in this study. The trend of scores revealed that students in the first composition class, ENC 1101, were more apprehensive initially than their peers in ENC 1102. Older students were more apprehensive than their younger classmates. These findings supported Rose's view of the college writing class as a kind of initiation or testing ground to be endured to achieve the role of college graduate (1988). Morrison (1994) noted that adult learners bring the fear of writing "good" papers with them to their classes, in addition to a set of anxieties about basic knowledge and inferior skills. Results from the initial writing apprehension measure in ENC 1101 classes reflected these characteristics of adult learners.

Participation in cooperative groups at the primary and secondary level helped student writers gain self-confidence and academic achievement; however, their use with adults was largely untested, according to Imel (1992). Community college subjects' scores revealed both a decrease in writing

apprehension and an increase in writing achievement in ENC 1101 classes after participating in peer response groups. These findings supported several research studies which indicated that the composition ability of students in small peer evaluation groups equaled or exceeded that of students receiving teacher-only feedback (Ford, 1973; Hillocks, 1986; Lagana, 1972; Maize, 1952; O'Donnell, 1985; Pierson, 1967; Sager, 1973; Sutton & Allen, 1964). They also added support to the theory of identity negotiation adult students undergo in the college writing classroom (Brooke, 1991; Cooper, 1989). Additionally, these findings discounted Fox's 1980 study which showed no significant difference in college students' writing achievement using peer response groups versus teacher-only feedback.

Students of all ages were less apprehensive in the second composition class, ENC 1102. This could have been because of their success in passing ENC 1101, thus bolstering their self-confidence and their writing ability. Their apprehension levels increased slightly but insignificantly in both nontreatment and treatment groups after completion of the study. In ENC 1102 classes, students produced a research paper which was a new writing experience for most and a large portion of their grade. More research should be conducted to determine if the research paper or some other variable caused apprehension levels to increase in ENC 1102 students.

Revision data showed subjects in both courses operating mainly at the formal surface change level. Spelling,

punctuation, substitution of words, additions and deletions comprised most of the revision operations of students in nontreatment and treatment groups. Subjects in ENC 1101 treatment groups revised more frequently than subjects in the other groups, but did not show a significant correlation in revision decisions and achievement. Revision frequency and operations supported Sommers' (1979) and Bridwell's (1980) studies of revision processes of college students and 12th grade students. Young (1992) also found freshman composition students operating at the surface change level. Her findings were confirmed by this study.

Recommendations

Recommendations generated by the study include time allotted for peer group interaction, the classroom environment, instructor effects, and training of peer response groups.

1. Considering that community college students were first introduced to each other at the beginning of the study, met together as a class only three hours per week, participated in a peer response group for only 30 minutes together, and were responsible for a myriad of other assignments in their composition classes, an assumption can be made that caring and productive work relationships may not have developed among group members. Thus, a new study should be conducted in which subjects interact in the response

group on a more frequent basis and for a longer period of time. In addition, a study could be conducted to test the ideal length of time in groups necessary for group members to develop positive working relationships.

2. Competition among group members could be fostered by individual members or by teachers who claim that in their class, "No one gets an A." Studies should investigate whether competitive classroom environments sacrifice the cooperation necessary to have a successful peer response group.
3. Because of the small number of instructors ($N=8$), instructor was removed as a variable from the models tested. Future research should involve a larger number of instructors to allow incorporation of instructor into the models tested.
4. A review of basic grammar and punctuation before students participate may help the initially less-skilled group member become more productive and more confident in critiquing papers.
5. Teacher-led modeling or role-playing of peer response group scenarios may enable students to gain a clearer perspective of what behaviors constitute a helpful peer response group member.

Future Research Inquiries

The following research recommendations were generated by information obtained in the study:

1. Further research should be done in relation to the development and implementation of revision instruction that adequately discusses and models all levels of revision listed in the Taxonomy of Revision Changes.
2. Researchers should investigate whether freedom of choice in topic selection stimulates or reduces writing anxiety when subjects' writing must be shared in a peer group.
3. More research needs to be done involving training procedures for peer response groups. Differing techniques and timetables for implementation may yield different results.
4. The difference in writing apprehension levels of ENC 1101 and ENC 1102 students should be researched. As demonstrated by this study, peer response groups proved effective in reducing apprehension in ENC 1101 students, but not in ENC 1102 students.
5. Studies involving research on peer response group members' academic abilities , such as reading and writing achievement scores, could be conducted.

Investigators could propose to find the best match of academic ability levels for a group.

6. The Myers-Briggs Personality Type Indicator should be administered to classes before beginning peer group interaction to determine whether personality type influences writing apprehension when students participate in peer response groups.

The results of this study were predominantly significant. Peer response groups help community college students of all age levels to lower their writing apprehension and increase their writing achievement in their first college composition classes but do not significantly affect writing apprehension and writing achievement in the second required freshman composition course. ENC 1101 students demonstrate a higher degree of writing apprehension and writing achievement than students in ENC 1102, perhaps because this is often the first college course the students take and they are academically unskilled in writing and/or lacking in self-confidence as a writer. As students become versed in the techniques of academic writing their achievement scores reflect this gain.

Writing apprehension would be expected to be lower for ENC 1102 students since these students have passed ENC 1101 with at least a "C" and have probably developed greater confidence in themselves as writers due to the passing grade. Writing achievement in ENC 1102 could also be lower because of the higher initial writing achievement scores expected

from students who have successfully passed ENC 1101. Age showed a direct positive correlation with both apprehension and achievement in both courses.

The null hypotheses were retained for some revision decisions of both ENC 1101 and ENC 1102 students, as peer response groups had no significant effect on the frequency or types of certain revision changes students made. Researchers should continue to analyze students' revision decisions and instructors' delivery of information about revision to their classes. This research will aid instructors in developing strategies to enable their students to take revision to a deeper level, if necessary, than simple cosmetic changes.

As the number of adult students attending community colleges continues to grow, problems and concerns relating to this segment of the student population will likewise continue to appear. Researchers can make valuable contributions to our adult learner knowledge base which increase the chance of success for the adult student.

APPENDIX A
WRITING APPREHENSION MEASURE

Below is a series of statements about writing. There are no right or wrong answers to these statements. Please indicate the degree to which each statement applies to you by circling the number that shows whether you strongly agree, agree, are uncertain, disagree, or strongly disagree with the statement. Some of these statements may seem to be repetitious. Please take your time and try to be as honest as possible. Thank you for your cooperation.

strongly agree	agree	uncertain	disagree	strongly disagree		
1	2	3	4	5	1.	I avoid writing. (+)
1	2	3	4	5	2.	I have no fear of my writing's being evaluated. (-)
1	2	3	4	5	3.	I look forward to writing down my ideas. (-)
1	2	3	4	5	4.	I am afraid of writing essays when I know they will be evaluated. (+)
1	2	3	4	5	5.	Taking a composition course is a very frightening experience. (+)
1	2	3	4	5	6.	Handing in a composition makes me feel good. (-)
1	2	3	4	5	7.	My mind seems to go blank when I start to work on my composition. (+)

- 1 2 3 4 5 8. Expressing ideas through writing seems to be a waste of time. (+)
- 1 2 3 4 5 9. I would enjoy submitting my writing to magazines for evaluation and publication. (-)
- 1 2 3 4 5 10. I like to write down my ideas. (-)
- 1 2 3 4 5 11. I feel confident in my ability to express my ideas clearly in writing. (-)
- 1 2 3 4 5 12. I like to have my friends read what I have written. (-)
- 1 2 3 4 5 13. I'm nervous about writing. (+)
- 1 2 3 4 5 14. People seem to enjoy what I write. (-)
- 1 2 3 4 5 15. I enjoy writing. (-)
- 1 2 3 4 5 16. I never seem to be able to write down my ideas clearly. (+)
- 1 2 3 4 5 17. Writing is a lot of fun. (-)
- 1 2 3 4 5 18. I expect to do poorly in a composition class even before I enter it. (+)
- 1 2 3 4 5 19. I like seeing my thoughts on paper. (-)
- 1 2 3 4 5 20. Discussing my writing with others is an enjoyable experience. (-)
- 1 2 3 4 5 21. I have a terrible time organizing my ideas in a composition course. (+)
- 1 2 3 4 5 22. When I hand in a composition, I know I'm going to do poorly. (+)
- 1 2 3 4 5 23. It's easy for me to write good compositions. (-)
- 1 2 3 4 5 24. I don't think I write as well as most other people. (+)

1 2 3 4 5 25. I don't like my compositions being
evaluated. (+)

1 2 3 4 5 26. I'm not good at writing. (+)

Scoring: Writing Apprehension = 78 + positive statement scores
- negative statement scores. Scores may range from a low of 26
(an extremely apprehensive writer) to a high of 130 (a very
confident writer).

APPENDIX B
PAUL DIEDERICH ESSAY RATING SCALE: MODIFIED

TO: Readers of Compositions by Community College
Students

From: Susan H. Sailor, Investigator

RE: DIRECTIONS FOR RATING PAPERS

Enclosed are papers to be rated according to the indicated
scale.

Definitions of Ratings

Definitions of ratings (in the form of brief descriptions of their common characteristics) on seven factors are given below to present a concrete idea of the qualities of writing that make a difference in the grades of qualified readers. This is a general guide. USE YOUR JUDGMENT AS TO QUALITY OF PAPERS AS THEY MIGHT FALL INTO THE HIGH, MIDDLE, OR LOW CATEGORIES.

I. GENERAL MERIT

1. Ideas

HIGH. The student has given some thought to the topic and writes what he really thinks. He discusses each main point long enough to show clearly what he means. He supports each main point with arguments, examples, or details; he gives the reader some reason for believing it. His points are clearly related to the topic and to the main idea or impression he is trying to convey. No necessary points are overlooked and there is no padding.

MIDDLE. The paper gives the impression that the student does not really believe what he is writing or does not fully understand what it means. He tries to guess what the teacher wants and writes what he thinks will get by. He does not explain his points very clearly or make them come alive to the reader. He writes what he thinks will sound good, not what he believes or knows.

LOW. It is either hard to tell what points the student is trying to make or else they are so silly that, if he had only stopped to think, he would have realized that they made no sense. He is only trying to get something down on paper. He does not explain his points; he only asserts them and goes on to something else, or he repeats them in slightly different words. He does not bother to check his facts, and much of what he writes is obviously untrue. No one believes this sort of writing--not even the student who wrote it.

2. Organization

HIGH. The paper starts at a good point, has a sense of movement, gets somewhere, and then stops. The paper has an underlying plan that the reader can follow; he is never in doubt as to where he is or where he is going. Sometimes there is a little twist near the end that the reader does not expect, but it seems quite logical. Main points are treated at greatest length or with greatest emphasis, others in proportion to their importance.

MIDDLE. The organization of this paper is standard and conventional. There is usually a one-paragraph introduction, three main points each treated in one paragraph, and a conclusion that often seems tacked on or forced. Some trivial points are treated in greater detail than important points, and there is usually some dead wood that might better be cut out.

LOW. This paper starts anywhere and never gets anywhere. The main points are not clearly separated from one another, and they come in a random order--as though the student had not given any thought to what he intended to say before he started to write. The paper seems to start in one direction, then another, then another, until the reader is lost.

3. Wording

HIGH. The writer uses a sprinkling of uncommon words or of familiar words in an uncommon setting. He shows an interest in words and putting them together in slightly unusual ways. Some of his experiments with words may not quite come off, but his is such a promising trait that a few mistakes may be

forgiven. For the most part, he uses words correctly, but he also uses them with imagination.

MIDDLE. The writer is addicted to tired old phrases and hackneyed expressions. If you left a blank in one of his sentences, almost anyone could guess what word he would use at that point. He does not stop to think how to say something; he just says it in the same way as everyone else. A writer may also get a middle rating on this quality if he overdoes his experiments with uncommon words; if he always uses a big word when a little word would serve his purpose better.

LOW. The writer uses words so carelessly and inexactly that he gets far too many wrong. These are not intentional experiments with words in which failure may be forgiven; they represent groping for words and using them without regard to their fitness. A paper written in a childish vocabulary may also get a low rating on this quality, even if no word is wrong.

4. Flavor

HIGH. The writing sounds like a person, not a committee. The writer seems quite sincere and candid, and he writes about something he knows, often from personal experience. You could not mistake this writing for the writing of anyone else. Although the writer may assume different roles in different papers, he does not put on airs. He is brave enough to reveal himself just as he is.

MIDDLE. The writer usually tries to appear better or wiser than he really is. He tends to write lofty sentiments and broad generalities. He does not put in the little homely details to show that he knows what he is talking about. His writing tries to sound impressive. Sometimes it is impersonal and correct but colorless, without personal feeling or imagination.

LOW. The writer reveals himself well enough but without meaning to. His thoughts and feelings are those of an uneducated person who does not realize how bad they sound. His way of expressing himself differs from standard English, but it is not his personal style; it is the way uneducated people talk in his neighborhood. Sometimes the unconscious revelation is so touching that we are tempted to rate it high on flavor, but it deserves a high rating only if the effect is intended.

II. MECHANICS

5. Usage, Sentence Structure

HIGH. There are no vulgar or "illiterate" errors in usage by present standards of informal written English. The sentence structure is usually correct, even in varied and complicated sentence patterns.

MIDDLE. There are a few serious errors in usage but not enough to obscure meaning. The sentence structure is usually correct in familiar sentence patterns but there are occasional errors in complicated patterns: errors in parallelism, subordination, consistency of tenses, references of pronouns, etc.

LOW. There are so many serious errors in usage and sentence structure that the paper is hard to understand.

6. Punctuation, Capitalization, Abbreviations, Numbers

HIGH. There are no serious violations of rules--except slips of the pen. Contractions are acceptable.

MIDDLE. There are several violations of rules.

LOW. Basic punctuation is omitted or haphazard, resulting in fragments, run-on sentences, etc.

7. Spelling

HIGH. There are few basic spelling errors in hard words and virtually no violations of basic spelling rules. The spelling is consistent; words are not spelled correctly in one sentence and misspelled in another--unless the misspelling appears to be the slip of the pen. If a poor paper has no misspellings, it gets a high rating on spelling, even if no difficult words are used.

MIDDLE. There are several spelling errors in hard words and a few violations of basic spelling rules.

LOW. There are so many spelling errors that they interfere with comprehension.

Rating the Papers

Record your rating on the slip provided. Encircle one number after the name of each quality to indicate your rating of the paper on that quality. At the right are spaces for subtotals of ratings on the first four factors under the heading of "General Merit," and on the last three factors under the heading of "Mechanics," and then a space for the sum of these two, the total rating. Remember to complete the top portion of the slip by filling in your reader number and the paper number.

Time Needed for Each Rating

Do not average more than five minutes per paper. These papers are being rated by other evaluators, and their only purpose is the measurement of achievement in writing. No corrections or marks of any sort should be placed on the papers.

Topic Possibilities

Students wrote on either of the two following topics: Being an Only, Oldest, Middle or Youngest Child; or The Importance of Belonging to a Group in High School.

APPENDIX C
INSTRUCTOR DIRECTIONS: COMMUNITY COLLEGE

1. Give the pretest writing apprehension test during the first week of class. Give the pretest essay assignment the same week and collect rough drafts and final copies no later than the second week of class.
2. Give the posttest writing apprehension test during the last week of class. Give the posttest essay assignment the same week and collect rough drafts and final copies.
3. The nontreatment groups have completed their involvement in the study.
4. The treatment groups will participate in the following:
 - A. Along with the regular classwork, students are to participate in peer response groups once a week for 30 minutes for a total of 450 minutes.
 - B. If a student is absent, mark an A next to his or her code number.
 - C. If an unexpected event occurs (bomb threat, instructor forgetfulness, etc.) mark a "U" for the week.
 - D. If a student does not want to participate, do not force him or her to take part in the response group.

5. The treatment groups have completed their involvement with the study.

APPENDIX D
TAXONOMY OF REVISION CHANGES

I. Surface Changes

A. Formal Changes

1. Spelling
2. Tense
3. Abbreviations
4. Punctuation
5. Paragraph
6. Other Format

B. Meaning-Preserving Changes

1. Additions
2. Deletions
3. Substitutions
4. Permutations
5. Distributions
6. Consolidations

II. Meaning Changes

A. Microstructure Changes

1. Additions
2. Deletions
3. Substitutions
4. Permutations
5. Distributions
6. Consolidations

B. Macrostructure Changes

1. Additions
2. Deletions
3. Substitutions
4. Permutations
5. Distributions
6. Consolidations

APPENDIX E
BROOKE'S STRATEGIES FOR PEER RESPONSE GROUPS

1. Ask for relating responses: have your group members had an experience like the one you've had, or thoughts like those you've had? Ask them to tell you the stories of those experiences or thoughts.
2. Ask for listening responses: have your group tell you what they think you were saying in the piece, and where in their own experience your message would be important.
3. Ask for positive response: have your group point out the parts of the piece they liked the best, and if possible say why.
4. As author, point out the part of the text you had the most trouble writing (it may be an idea more than a particular passage) and ask them to describe how they reacted to it. What did they feel/think at that point?
5. Ask each group member to give a movie of the mind response, describing section by section what he or she felt, thought, and imagined while reading the piece.
6. Ask group members to point out parts they didn't like or had trouble with and have them explain why.
7. Ask them, if it were their piece, what changes they would make and why.

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BIOGRAPHICAL SKETCH

Susan Hardee Sailor was born in Lake City, Florida, June 16, 1963. She graduated with honors from Interlachen High School, Interlachen, Florida, in 1981. She began her college career at the University of Florida the same year, where she was a member of the College of Education Student Council. She received the degree of Bachelor of Arts in Education with a concentration on English in 1985. In 1986, she received a Master of Arts in Education from the University of Florida. From 1985 to 1987, she taught secondary English and journalism at P.K. Yonge Laboratory School in Gainesville, Florida, where she also served as yearbook adviser. From 1987 to 1993, she taught English and journalism and was the yearbook adviser at Gainesville High School. In 1993, she moved to Keystone Heights, Florida and taught English and journalism at Keystone Heights Jr./Sr. High School. From 1994 to the present, she has taught English in that school's Specialized Program for Educating At-Risk Students (SPEARS). She also teaches composition classes at St. Johns River Community College campuses in Orange Park and Palatka, Florida.

Among the awards and honors she has received are finalist for Florida Journalism Teacher of the Year, Florida

Scholastic Press Association's Gold Medallion for outstanding service to scholastic journalism, and the Keystone Heights Jr./Sr. High School's Teacher of the Month and Teacher of the Year. In 1996 she was selected as the Clay County Teacher of the Year. She served as the Florida Scholastic Press Association's district director and state convention co-chair. Yearbooks she has advised have won top awards from state and national press associations. She was co-author, along with Dr. Julie Dodd, of a grant funded to write a curriculum guide, Using Newspapers to Teach Journalism. The guide was distributed to all middle and high school journalism teachers in Florida.

Among the professional organizations in which she holds membership are the National Council of Teachers of English (NCTE), Florida Council of Teachers of English (FCTE), and the Association for Supervision and Curriculum Development (ASCD). She has made numerous presentations at state and national journalism and dropout prevention conventions.

Susan Sailor is married to a veterinarian, Dr. Joel Sailor. She has one son, Carson. The Sailor family resides in Keystone Heights, Florida.

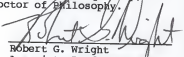
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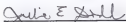
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